CHRISTIAN THOUGHT.

LECTURES AND PAPERS ON

PHILOSOPHY,
CHRISTIAN EVIDENCE,
BIBLICAL ELUCIDATION.

SEVENTH SERIES.

EDITED BY

CHARLES F. DEEMS, LL.D.

PRESIDENT OF THE AMERICAN INSTITUTE OF CHRISTIAN PHILOSOPHY.

DIGITIZED BY NEW HAMPSHIRE STATE LIBRARY
New Hampshire
STATE LIBRARY,
NOV 21 1896
No. 23652

NEW YORK:

WILBUR B. KETCHAM,

13 COOPER UNION.

80810

v.7
1889/90

Copyright
BY CHARLES F. DEEMS.
1889-90.

CONTENTS.

LECTURES AND PAPERS.

PAGE.

THOUGHTS ON THE DISCORD AND HARMONY BETWEEN SCIENCE AND THE BIBLE, ... 1
Francis H. Smith, LL.D.

THE RELATION OF PEDAGOGY TO CHRISTIAN PHILOSOPHY, 20
Jerome Allen, PH.D.

FIVE POINTS IN AN EVOLUTIONARY CONFESSION OF FAITH, 36
Rev. Anson P. Atterbury.

EVOLUTION AND DEVELOPMENT, ... 61
Charles F. Deems, D.D. LL.D.

THE NECESSITY OF FAITH, ... 81
Alexander Mackay-Smith, S.T.D.

WOMAN'S WORK IN THE MODERN CHURCH, . . . 91
Jane M. Bancroft, Ph.D.

AMERICAN INSTITUTE OF CHRISTIAN PHILOSOPHY—WHAT IS IT? 114
Charles F. Deems, D.D., LL.D.

THE CASH VALUE OF CONSCIENCE, ... 118
Mr. George M. Powell.

MAN'S INHERITANCE IN THE SABBATH, ... 131
Rev. Greenville Ross Pike.

NO SUBSTITUTE FOR CHRISTIANITY, ... 142
Rev. Dr. Rivers.

SCIENTIFIC THEORIES AND CREEDS, ... 161
Prof. Charles F. Himes.

THE CHURCH, THE PULPIT AND SOME ASPECTS OF MODERN DOUBT, ... 187
Rev. William Ainley.

PSYCHOLOGY A STUDY FOR STUDENTS OF MEDICINE, . 205
Vice-Chancellor Henry M. MacCracken, D.D., LL.D.

THE ARGUMENT OF PROBABILITIES, ... 219
Rev. J. Q. Adams.

IMMORTALITY, ... 228
Rev. H. G. Henderson, A.M.

THE SERVICE OF FREE THOUGHT TO CHRISTIANITY, . 241
E. A. Stafford, D.D., LL.D.

THE LIMITED AREA OF CHRISTIANITY, ... 263
Prof. Wm. W. Olssen.

CHRISTIAN SCIENTISM, ... 277
D. B. St. John Roosa, M.D., LL.D.

REALISM, ... 297
Prof. Clarence U. Carruth.

IN THE MIDDLE, ... 303
Gouverneur M. Smith, M.D.

NATURAL IMMORTALITY, ... 310
Giles H. Mandeville, D.D.

THE USE OF RETALIATION IN THE MOSAIC LAW, . . 321
Austin Abbott, Esq.

MEN OF LITERARY GENIUS AND CHRISTIANITY, . . 334
Jeremiah Eames Rankin, D.D., LL.D.

THE USES OF THE IMAGINATION IN HISTORICAL SCIENCE, 360
Rev. George C. Yeisley.

REALISM, ... 370
Mr. E. Coit Morris.

CHRIST THE CENTRE OF THE COSMOS, ... 375
Rev. George W. King.

LAW AND MIRACLE, ... 378
Prof. Warren Holden.

THE PHILOSOPHIC BASIS OF CHRISTIAN THEOLOGY, . 381
Richard Wheatley, D.D.

IS THERE ANY SCIENTIFIC EVIDENCE OF THE CREATION OF MATTER? 394
Joseph J. Smith, D.D.

CHRISTIAN PANTHEISM, ... 401
Rt. Rev. Bishop Samuel Fallows.

IMMORTALITY IN THE OLD TESTAMENT SCRIPTURES, . 415
Charles D. W. Bridgman, D.D.

On the Beauty of Nature, ... 421
Rt. Hon. Edmund Lord Grimthorpe, LL.D.

Monkey Ancestry, ... 436
R. A. Abbey, D.D.

Human Ability, ... 440
Rev. George Shipman Payson.

For Him, ... 447
Rev. Geo. W. King.

Social Life in the Church, ... 450
John Y. Dobbins, D.D.

Concessions to Science, ... 458
Prof. Geo. Macloskie, LL.D.

VIEWS AND REVIEWS.

Creation, Joseph Parker, D.D., ... 147
Virchow on Darwin, ... 150
Patrick Henry's Death, ... 314
Heine's Death-bed, ... 316
Miscellaneous Notes, ... 468–473

ABOUT BOOKS, ... 65, 160, 238, 320, 400

AMERICAN INSTITUTE OF CHRISTIAN PHILOSOPHY.

Monthly Meetings, ... 64, 236, 318, 398, 473
Summer Schools, ... 153
List of Members, ... 69
Endowment, ... 235, 318

SYMPOSIUM.

Is There Any Other Science than Physical Science? If So, What and Why? Prof. Noah K. Davis, Rev. Joseph Cook, Prof. Francis H. Smith, Prof. Simon Newcomb, Sir J. W. Dawson, R. B. Fairbairn, D.D., . 104

INDEX BY AUTHORS.

Abbey, D.D., R. A., ... 436
Allen, Ph.D., Jerome, ... 20

ATTERBURY, REV. ANSON P., ... 36
AINLEY, REV. WILLIAM, ... 187
ADAMS, REV. J. Q., ... 219
ABBOTT, ESQ., AUSTIN, ... 321
BANCROFT, PH.D., JANE M., ... 91
BRIDGMAN, D.D., CHARLES D. W., ... 415
CARRUTH, PROF. CLARENCE U., ... 297
COOK, REV. JOSEPH, ... 104
DEEMS, D.D., LL.D., CHARLES F., ... 61, 114
DOBBINS, JOHN Y., D.D., ... 450
DAVIS, PROF. NOAH K., ... 104
DAWSON, SIR J. W., ... 104
FAIRBAIRN, D.D., R. B., ... 104
FALLOWS, RT. REV. BISHOP SAMUEL, ... 401
GRIMTHORPE, RT. HON. EDMUND LORD, ... 421
HIMES, PROF. CHARLES F., ... 161
HENDERSON, A.M., REV. H. G., ... 228
HOLDEN, PROF. WARREN, ... 378
KING, REV. GEORGE W., ... 375, 447
MACKAY-SMITH, S.T.D., ALEXANDER, ... 81
MACCRACKEN, D.D., LL.D., VICE-CHANCELLOR HENRY M., 205
MANDEVILLE, D.D., GILES H., ... 310
MORRIS, MR. E. COIT, ... 370
MACLOSKIE, LL.D., GEORGE, ... 458
NEWCOMB, PROF. SIMON, ... 104
OLSSEN, PROF. WM. W., ... 263
PAYSON, REV. GEORGE SHIPMAN, ... 440
PARKER, D.D., JOSEPH, ... 147
POWELL, MR. GEORGE M., ... 118
PIKE, REV. GREENVILLE ROSS, ... 131
RIVERS, REV. DR., ... 142
ROOSA, M.D., LL.D., D. B. St. JOHN, ... 277
RANKIN, D.D., LL.D., JEREMIAH EAMES, . . . 334
SMITH, LL.D., FRANCIS H., ... 1,104
STAFFORD, D.D., LL.D., E. A., ... 241
SMITH, M.D., GOUVERNEUR M., ... 303
SMITH, D.D., JOSEPH J., ... 394
WHEATLEY, D.D., RICHARD, ... 381
YEISLEY, REV. GEORGE C., ... 360

CHRISTIAN THOUGHT.

THOUGHTS ON THE DISCORD AND HARMONY BETWEEN SCIENCE AND THE BIBLE.

[Delivered before the American Institute of Christian Philosophy, 27th of July, 1888.]

BY FRANCIS H. SMITH, LL.D.,
Professor in the University of Virginia.

THE term Science is, in our days, sadly abused. We have high authority for applying the name to all bodies of exact knowledge that are reduced to system. Thus there is a science of mind, of language and of law, as well as of life and matter. Yet it is the fashion of the times to confine the term to the latter, and largely to those branches in which the conclusions reached can be tested by exact measurement. The astonishing progress of these branches in recent years, due partly to the substitution of methods of precision for such as are less rigorous, has profoundly impressed the world. This is the reign, in physical science, of the balance, the micrometer and the chronograph, and it is a brilliant one. It is significant to find, not merely the general public, but the philologist and the metaphysician as well, meekly submitting to the quiet arrogance of the physicist and speaking of science and scientists as though these were beyond their own sphere. Yet if there is any value in scientific method, they may exhibit and claim it too, and if there be any reproach in it, a part must be borne by them. For while they deal with phenomena too subtle to be handled with the implements of physics, their logic is the same as that of the physicist, and their just conclusions are no less valid than his. If in what follows we shall sometimes, for brevity, use these terms in their popular and too limited sense, we disclaim, at the outset, the apparent arrogance and any disposition to justify it.

We hear much in these days of a conflict between science and the Bible. So far as I know, there is no conflict between the science of mind and the Bible, or between the science of language and the Bible—or between the science of law and the Bible. Turning to the physical sciences, and setting aside a few events, termed miracles, which the Book itself, by the use it makes of them, declares to be outside of the sphere of science, I am not aware of any conflict between the Bible and the sciences of chemistry, or astronomy, or physics. The conflict, if it exist, appears to be between certain received teachings of the Bible as to the age of the earth and of man, and the origin of species, and the received teachings of biology and geology concerning the same matters. It is worthy of remark that the disagreement is with the most complex and difficult sciences and not with the simplest and most exact, although less was known of the latter in the earlier times than of the former, and we might fairly expect to find in a human composition of those times, more errors in physics than in biology.

Far be it from me to disparage inquiries into these asserted conflicts. They are full of living interest and compel attention. On the one hand, the student of the Bible must concede the existence and value of another "revelation"—that of material nature. The sacred books use it, as "the unspotted mirror of God," evincing His power and Godhead. The Biblical student cannot be indifferent to those conclusions of physical science which bear upon the Bible.

On the other hand, the mere physicist cannot deny that there is a vast field of knowledge outside of, if not above, his own special territory. The sacred Scriptures are a body of phenomena to be accounted for, and there is a true science of them. They have been a factor in history and civilization which cannot be overlooked. Where two natural sciences, like physics and geology, overlap, the common ground has a double interest and value. How much more interest must attach to the intersection of Biblical science and natural science.

Let me here give emphasis to my belief that the conflict, if any, is between two human sciences, the science of Biblical interpretation and the science of nature. It is inexact to say, as for

brevity I have said above, that it is between science and the Bible. It is distinctly between the present interpretation of parts of the Hebrew Scriptures and the present interpretation of certain parts of nature. Both are human sciences, using the same organon, liable to the same limitations, and progressing, as all science does, slowly by flow and ebb, the flow on the whole surpassing the ebb, but only a little surpassing it. They are both comparatively modern sciences. The greatest advances in each have been made in quite recent times. They are both immature. Men yet living can recall in each the rise, culmination and decay of propositions, which in their time were as confidently asserted as the most widely received doctrines of the present day.

In each department we are dealing not with a fixed system of truth, but with a body of knowledge, slowly moving by a process of "trial and error" toward a limit of precision never to be reached. This progress involves a continual putting away of the old and putting on of the new. The science of one epoch is to a large extent a help which the science of the next uses and abandons. One example from physical science will perhaps suffice. In the last century and in the early part of the present one, no doctrine of physics seemed to be more firmly established than Newton's projectile theory of light. Its advocates tolerated no dissent from it. Henry Brougham, in the early pages of the *Edinburgh Review*, poured a flood of ridicule on poor Thomas Young, who ventured to doubt the current hypothesis, and the whole world joined in the laugh. Only a few years elapsed, and under the trenchant blows of Fresnel and Arago this great theory went down to oblivion, giving place to the theory of undulation which has now for fifty years reigned in its stead. Nothing in science has seemed to be better established than the wave theory of light, as delivered by Fresnel. The positiveness with which many now advance its statements and the impatience with which they receive doubts of its adequacy, are quite equal to the similar traits of Brougham and his friends nearly a century ago. Indeed to most of us the discovery of its unreality would be like shaking or dissolving the solid foundation of things. Yet there are grave signs that Fresnel's wave theory, like its predecessor,

is to be a stepping-stone to a better view of the nature of light. The old wave theory will die hard no doubt, but it may die nevertheless.*

Doubtless one well acquainted with the history of Biblical exegesis and text criticism might give an equally striking example of the fugitive character of theories in that science. Now the conflict or harmony of two imperfect and advancing sciences should be treated with a constant recollection of their transitional character. When a distinguished doctor of divinity † was asked about the reconciliation of physical science and Biblical interpretation, he aptly replied:

"What science? that of to-day or yesterday?"

He might with well-nigh equal truth have answered "What interpretation?" To harmonize the Bible and the science of to-day, which Clerk Maxwell says "may not agree with the science of twenty years later," may possibly be a futile labor. The reconciliations of fifty years ago are mentioned now with a smile. What is to be the fate of those in vogue now? A pregnant remark of Maxwell's in a letter to Bishop Ellicott may be quoted here.

"The rate of change of scientific hypothesis is naturally much more rapid than that of Biblical interpretation, so that if an interpretation is founded on such an hypothesis, it may help to keep the hypothesis above ground long after it ought to be buried and forgotten."

If these views are true, the lessons they teach are obvious and weighty, and may briefly be mentioned here.

I. The discovery of supposed harmonies should not greatly elate us nor should the assertion of contradictions be received with impatience or despair. The advances of the two sciences may alter the supposed facts and remove either the harmony

* Since this sentence was written, it has received unexpected confirmation in both of its clauses. Sir W. Thomson, in an article in the *Philosophical Magazine* for November, 1888, has removed from the Fresnel, or "elastic solid," theory of light a serious difficulty of long standing. On the other hand, within the same period there have appeared the brilliant experiments of Hertz of Berlin upon electro-magnetic waves, which, as some enthusiastic teachers declare, have demonstrated the truth of Maxwell's electric-magnetic theory of light. This is also an undulatory theory.

† Dr. John A. Broadus.

or the discord. Nor should we demand that a discrepancy shall be removed in our own time. Life is short and science is long. Let us be willing to wait a hundred or a thousand years, calm in our belief that truth will be found to be self-consistent. There are discrepancies between physics and geology but we do not on that account abandon either as false. Physical science presents outstanding unreconciled statements of fact and inference. But the physicist waits, and works, and believes.

II. We may wisely leave these questions of reconciliation between Bible science and nature-science to the experts in each department. Imperfect information is often associated with rashness. The unsettled parts of a science are just those which are most attractive to sciolists. Experts are usually cautious in their own domain. These delicate questions should be left to the masters in the two sciences, who will treat them modestly—not dogmatically. Great damage, I fear, has been done to truth by the haste with which some lovers of the Bible have welcomed and adopted immature, or even false, views of nature that seemed to make for the Bible and against scepticism. The impression which such haste produces on well-informed scientists must be a painful one. To couple what one holds dearest with a specious but doubtful dogma argues a lack of confidence in the truth which often has more reason to fear its friends than its enemies.

In dismissing this part of my subject, I would say most earnestly and heartily that if the settled laws of nature, about which there is no dispute, suggest to the devout student of the Bible, as they often most powerfully do, the unity of the natural and spiritual order, let them by all means be so employed. A vigorous and eloquent pen * has nobly done this for the world of life —but a rich field remains untouched.

Turning from the inquiry as to the agreement of the voice of Scripture with that of physical science, where they happen to speak of the same things, we inquire whether there is no other relation between the two whereby we may ascertain their harmony or discord.

* Prof. Drummond's.

The Scriptures reveal to us a scheme called Christianity, the centre of which is Christ. The Christian scheme has to do primarily with moral character and secondarily with doctrine. The scheme of natural science has to do first with doctrine and indirectly with moral character. Each has therefore relations direct or indirect with morals. It seems to me that a legitimate and valuable comparison between the two may be found in the answer to the questions: What are the moral qualities required of the devotee in each system for advance to its highest mark? What are the moral traits of the perfect, or ideal man, in each scheme? What are the moral qualities cultivated by each? If we should find these qualities to be antagonistic, it would be a strong evidence that the two systems could not have proceeded from the same author.

If, on the other hand, independent examination shows that the fundamental moral qualities demanded and fostered by the two systems are identical, and that their order and relative importance are the same in both, we shall have a convincing indication that Christianity and nature are from the same hand. A harmony of this kind would be unaffected by the growth of science, except that it would emerge into clearer light.

Such a comparison would carry with it greater weight in favor of Christianity if it should appear that the moral qualities thus exalted by physical science are either contemned or ignored by rival religions—or if acknowledged at all, are remanded to an inferior place.

Let us listen then first to the voice of nature as she speaks in the lives of her greatest votaries and in her own teachings, and learn what are the qualities of heart which she requires of her children for entrance into her courts. Who is the perfect man, as viewed from *her* position?

I. The answer undoubtedly is that his first and greatest virtue is *humility*.

The scene that is presented to us in the material world is one which from time immemorial, by its vastness, has excited and oppressed the imagination. Even the childish views of the visible universe, to which the ancients were shut up, overwhelmed the contemplative with awe. "To count the stars, or

measure the earth," was their synonym for an impossible task. The contrast between the greatness of the universe, even as imperfectly known to them, and the littleness of man furnished an obvious theme for the moralist and the poet. If such were the fact in the infancy of knowledge, how indescribably exalted is this contrast, by the knowledge of the universe which we possess.

David's starry dome, to him only a little way above the clouds, has been pushed farther and farther away, expanding more rapidly than the flying centuries, until in sober truth "its centre is everywhere and its circumference nowhere." The sun, which for him was doubtless no bigger than the moon, has in men's conceptions retreated 400 times farther back, and swollen in size, until it is 800 times as massive as all the planets together. Yet this superb orb, the lord and giver of life and motion, from which planets and moons derive their mass, their light and their energy; this glorious shining sphere, which has been lavishing its treasure of heat it may be for twenty million years and has a store for ten million more, is but an inferior unit among the forty million suns which are doubtless within the reach of the great California telescope. This expansion in our views of the universe has left our earth immeasurably more insignificant than the speck it was once the fashion to call it. It is nothing. To mention it, is grossly to exaggerate its relative importance.

The dimensions of time are no less vast than those of space. Geologists demand nothing less than hundreds of millions of years. While the physicist is not prepared to admit these vast demands, he is willing to grant a duration which we may name, but can by no means grasp in thought. These reflections, the commonplaces of the schoolboy, so trite that they have lost their power to stir us, have been used from immemorial time to chastise the pride of man. "When I consider Thy heavens," sang David, "what is man!" How absurd in a creature, occupying a point in space and a moment in time, to strut forth in presence of the silent infinities. The vastness of the universe rightly enjoins humility.

But while such is a legitimate use of this reflection, it is perhaps better suited to the early period of our own lives and of

the life of our race. Maturer minds are less impressed by these disclosures of the immensity of creation. For after all the numerical greatness of a measured quantity depends on the size of the arbitrary unit one adopts. The fixed star, whose distance, when expressed in *miles*, stretches in unmeaning length across the page, appears to be brought quite near, when we take as a measuring rod the line which a ray of light describes in a year.

Now it is true that to realize this distance, we must realize the unit adopted as well as know the ratio. Hence we are ordinarily restricted to such units as the length of our limbs, or our stride, or an hour's walk. But these lengths are wholly accidental. If we had occupied a smaller planet, our bodies might have been many times larger, and our natural units of length proportionately expanded. We are persuaded too that our volitions are to our muscles what the touch on a trigger is to a gun. The act of will that stretches forth our puny arm would suffice to extend it, did it reach from here to Uranus. With a body of corresponding dimensions, the distance of the nearest star world would be a morning's walk, while that of the farthest one might be only a summer tour. It will occur to the thoughtful that distances and durations should not impress us as the absolute and unconditioned has a right to do. Numerical grandeur ought not to stun a rational being. It is not mere material extent which is best calculated to foster humility in a reverent and thoughtful soul.

But is the physical universe exhausted when we have gauged its depth, counted and weighed its orbs, and measured its durations? By no means. Behind these facts of mass, and distance, and time lies the greater and better part of the universe. From the contemplation of these phenomena emerge the nobler ideas of universal law, of cosmic order, of majestic force. In these we discover the great soul of science in whose solemn presence the greatest mind may bow as a child. Before the ineffable and awful beauty of truth, the shekinah of this sanctuary, the mature philosopher bends with a reverence which he cannot pay to the stones and beams of the temple. He may stand erect in the presence of the unfathomed abysses of space with their countless contents of varied splendor, but he must feel

that he is a very little thing, when there arises in his soul the conception of the grand law by which this innumerable host is made a system.

The occasion and need for humility are greatly enhanced when from the general conception we descend to particulars. The contemplation of nature fills us with astonishment when we contrast the simplicity of her causes with the complexity of their results. Newton declares that "nature loves simplicity and affects not the pomp of superfluous causes," and makes this statement one of his guides in the interpretation of her processes.

The law of gravitation may be stated, and comprehended by a child, but when it is remembered that each body in the universe gravitates to every other body, and in its movement must obey that influence, it is easy to see that the displacement of any one mass involves a complex which no human mind can unravel. What is true of gravity applies equally to other forces. Their operation is mingled hopelessly in the case of each body; so much so that the complete statement of any actual physical event is impossible. The younger Herschel is reported to have declared that if all the conditions of any physical question were rigorously written out, the resulting differential equation would belt the earth. Were absolutely rigorous conformity to facts, however minute, demanded, there could be no science.

Mathematics can give us a rigorous solution of the problem of two particles only, subjected to the law of gravitation. Add a third and the solution is possible only under certain conditions, and then it is merely approximate. Yet there is no problem in nature so simple as the latter. What a lesson of humility we have here! Place the intricacy of nature and the limited power of the human mind in juxtaposition and mark the disparity. Should a little child attempt to grasp a mountain, the effort would be less presumptuous.

How then have the triumphs of science been won? The answer gives still more cause for humiliation. It happens most fortunately that in the multitude of influences to which each body is subjected the greater part are insensibly small, and are for us practically non-existent. Of those which cannot be disregarded, one is usually large, and the rest may be considered as mere dis-

turbances of it, which may be calculated separately, and added together, their joint effect being nearly equal to this sum. The solution, it is true, is imperfect and only approximate, but if the result differ from the truth by something less than one can measure, it is accepted as exact, because it is indistinguishable from the truth.

There are, however, very few physical problems which can be attacked in this high mathematical way. In the great majority of cases one cannot begin at the beginning, but must seek by experiment to be set very near to the conclusion before the question can be put into a mathematical form admitting of solution. Experiments take the place of impossible integrations. In many problems of the highest interest, involving the ultimate constituents of bodies, we are forced to adopt what Maxwell calls the statistical method and reason by averages to results which become more faulty as the groups become smaller.

The whole region of science in its most exact form is thus a theatre of artifice and expedient. These are a confession of weakness. The scientist approaches his question as a hunter his game. He watches and creeps and seeks vantage ground, and then mostly fails. Where is there room for arrogance and pride? The physicist must stoop to conquer, and must stoop very low. Surely of all the qualities demanded of the votary of science, the first and chiefest is humility.

II. Next to humility, the moral quality most urgently demanded of the scientist is *faith*, or a capacity to believe that for which there is evidence indeed, but no immediate sensible evidence, and to act on that belief. The cold intellectual constitution, that demands demonstration before assent, is an effectual bar to scientific progress. When we enter the field where action must be based solely upon preponderance of probability, and *demonstration* to the limited extent that it exists at all is solely destructive, the moral character of the student will have a great deal to do with his intellectual movements. We call the height of conviction here "moral certainty," the only kind of certainty we can have as regards positive statements, either in the domain of conduct or in that of the sciences of observation or experiment.

Scientific research has taught us that the ultimate materials of the physical universe are hopelessly beyond the reach of our senses, however these may be aided by instruments. What is seen is made up of what is unseen, and derives all its properties from it. The atoms, forever invisible, are the efficient units of the visible world. In the insensibly small spaces surrounding and separating these material points are displayed the activities which determine solidity and fluidity, which generate the marvels of light and heat, and constitute the secrets of electricity. The triumphs of modern science have been largely won in this unseen world, where he who walks, walks by faith and not by sight. No one can enter here who is not prepared to accept and realize the invisible. His ability to thread his way in this, the real though hidden, universe will depend not only upon his imagination or power to "visualize" the atomic figures and swings (for this may mislead by its too clear definition), but upon a healthy discrimination between that which is essential and that which is unimportant, and a hearty confidence in the former Surely then modern physics, whose highest studies are thus conducted in a region beyond cognizance of the senses, demands and cultivates in its votaries the faculty of realizing the invisible.

This will appear yet more clear if we look a little farther into recent science. Bodies and their atoms form but a part and that not the most important part of the universe. The latter is made up of two things : matter and energy, or power associated with matter. This power is inexpressibly fugitive. Bodies and atoms are incessantly exchanging it with one another. These transfers constitute the events of the material world. All that happens to bodies, their motions, changes, effects on our senses, are the result and signs of transfer of energy to and fro. A world whose energies could not be thus transferred from one member to another, would be exactly like a world void of energy, dark, silent, motionless, dead. Energy is therefore the great direct subject of scientific study, and matter is only known indirectly through energy. The closeness of the association between matter and energy is suggestively shown by the fact that the laws of energy are identically repeated in the laws of matter.

Thus there is a law of transmutation for each, a law of conservation for each, and a law of dissipation for each. It would not be wrong to say that physical science is the science of energy. Yet energy is wholly invisible. If in the realm of matter where a part is visible, science cannot proceed without faith, much less can she do so in the greater realm of energy, where all is invisible. This faith, like all genuine faith, is in harmony with reason. Science judges of the things that are unseen by the things that do appear. When she emerges from the world of sense into the world beyond sense, her steps become more confident, and she advances with an elastic freedom that shows that she is in her native element. The laws of the invisible world are better known, its phenomena are simpler, and its conclusions are more certain than those which refer to the visible world. I should undoubtedly place, as the second moral quality in the character of the perfect scientific man, faith in the unseen.

III. Next to these fundamental requisites, and scarcely inferior to them in value, is *love of truth.* Such a love excludes prejudice and pride of opinion and party spirit. Where the latter exist, they operate on the intellect as shackles upon the limbs. The fields of scientific research are intricate and difficult while the powers of the explorer are feeble and limited. His task is hopeless if he begin his work handicapped or fettered. The cultivation of science often requires the sacrifice of ease, of taste, of fortune, of health, nay of life itself, and often of what to many is harder to bear than all these, the giving up the cherished opinions of a life-time. As a reward for all these losses she offers only the truth. Nothing but a passionate love of the truth can ensure the noble choice.

The annals of science show that this loyalty to truth has characterized the great discoverers of our own and other ages.

I recall the instance of Newton, who, when the secret of the world was within his grasp and nothing but a trifling numerical discrepancy intervened, paused for twenty years, patiently waiting for new light, at a time when other keen minds were on the same track, and he might any day have seen the crown snatched by another.

Think of Baily, who, when by a long, difficult and delicate research he had accumulated records of 1,300 pendulum observations, and a discussion of them revealed to him some unknown vitiating bias of a minute amount, did not hesitate to burn them all, though the act cancelled a year and a half of precious time. A less lofty intolerance of error would have sought to claim some recognition for these hard-earned results. Think of Darwin who worked and waited in obscurity for thirty years to make sure of his ground, when a less conscientious man would have rushed into print with a brilliant but immature hypothesis.

Contrast with these examples the feverish haste with which struggling aspirants for fame hasten before the public with embryonic facts, which largely turn out to be abortions. The freedom of the press is a great boon, but we pay daily for it a great price.

The corrective for this haste is a love of truth superior to love of fame. The love of truth is a wholesome restraint, much needed in this age of irrepressible movement and bold speculation.

But it is not only a curb, but a spur. It leads to industry in pursuit and patience under disappointment. These qualities are indispensable to success, for not only are the problems of e intricate, but she *conceals* the truth. It seems to be her glory to hide a matter. She makes no provision for carelessness or weakness or laziness. On the contrary the world appears to be so constituted as to lead these wrong.

If nature were to take human form, it would often be that of a beautiful coquette, delighting to mock her suitor, to deceive him and laugh at him. The protective mimicry of which naturalists tell us has its analogies throughout science, making it easy to err, and hard to grasp the truth. The farther and higher the student goes, the more is he impressed with this. Sir J. Herschel, in a remarkable passage in one of his essays, refers to this fact. Speaking of what he denominates the two most difficult and delicate of physical problems—the parallax of the fixed stars and the mean density of the earth—he declares that in their solution "every element, nay even the elementary powers of heat, electricity, the molecular movements of the air, the varying elas-

ticity of fibres and a host of ill-understood disturbing causes, set themselves in opposing array in their most recondite and unexpected forms of interference." This undoubted fact in the existing constitution of nature need not trouble him who believes that the material universe is meant to be a school for the mind. A world without puzzles and disguises, where indolence and carelessness would be as safe and profitable as their opposites, might be a beautiful world. It would be worthless as a school. In the actual world of science then, love of truth is indispensable to the complete man.

Very closely allied to this quality is that with which I shall close this enumeration, viz.:

IV. *Simplicity.* By this I mean that singleness of mind which in conduct leads to consistency and in intellectual matters begets clearness of thought. Perspicacity is indispensable to the scientist. His experiments are questions addressed to nature. If the thought be confused, the question will be involved, and it may be that several questions will clumsily be asked at once. Now nature answers everything that is asked of her, but if the inquiry be mixed and disordered, the answer will be so too, and although true, it will be unintelligible. For success in research the student must have a point to make and must make it. Such intellectual simplicity is the natural product of simplicity of character. Duplicity in morals may not always be joined with confused thinking, but they are natural allies. To follow two masters in morals leads often to a similar oscillation between truth and error in speculation. Such wavering is incompatible with progress in science. Nature is on the side of honesty, and sternly represses the false and the fickle. She has no pity for weakness, and towers above imbecility like a frowning despot, while she yields with smiling grace to the strength which is begotten of simplicity.

I have thus enumerated what seem to me to be fundamental moral qualities requisite for a complete scientific character. I have tried to think of science alone, and divest myself of any disposition to read into it what is not rightfully there. Other qualities beside are included, but these four, humility, faith, love of truth and simplicity are, I judge, primary and essential.

When we turn from the world of matter to the spiritual world and ask whether among the various religions of the world we find any one which gives to these qualities the fundamental place accorded to them by science, it requires perhaps no great learning to reply. For if they be prominent in any scheme, the fact will be obvious. If we are rightly informed, they are not found in the code of Mohammed, with all its undenied, though it may be borrowed, superiority to idolatry; nor in the cold wisdom of Confucius; nor the lofty apathy of Buddha. If we may credit the accessible accounts of these and other anti-Christian systems in our own tongue, there is in them, amongst a wealth of precept and comment, often wise and true, a conspicuous silence in regard to the great essentials we are now concerned with. Indeed we might use our first quality "humility" as our infallible test, at whose touch disguises fall away and the true character of the system is revealed. None have a place for it. None recognize it as the foundation of character and the essential support of virtue.

There is but one system known to me which stands the test. You have long anticipated me in the declaration that it is the system revealed in and derived from the Bible. Christ's words are the only ones in the long ages which give to these qualities the same fundamental value and the same relative importance which they enjoy in the scheme of science. Let us reverently listen to them.

"At the same time came the disciples unto Jesus, saying, Who is the greatest in the kingdom of heaven? And Jesus called a little child unto Him and set him in the midst of them." If we ask what quality in the child did the Lord mean to make prominent, we are not left in doubt. It was not the beauty, or the innocence, or the helplessness of the child. It was his humility: "whosoever therefore shall humble himself as this little child, the same is greatest in the kingdom of heaven." He goes on to tell us that in heaven the angels of the mighty wait their turn for audience, but the angels of the little ones are always in the presence. Of all the paradoxes of the Gospel, this is the most sublime. That the weakest is the strongest, and the lowliest the loftiest, may be folly to the cultivated and an offence to the

self-righteous, but it is divine wisdom, though intelligible to a child, in the Christian scheme. It differentiates it at once from all false systems, and harmonizes it with all nature. Both nature and grace say "he that humbleth himself shall be exalted."

Again, in the schemes of Christ, humility opens the door to faith. Christ says "he that believeth shall be saved." It is the burden of His preaching and has been ringing through His Church ever since, the doctrine by which it stands or falls. Those who are His, walk in an unseen world which is to them more real than that which is seen. Here, too, the Christian is scientific in the highest sense, for he believes, on evidences, in that which is hidden from sense, and acts on his belief.

Again Christ says, "I am the Truth," and in demanding of His disciples a supreme love, He gives to the passion for truth a concrete object, and ensures to it by this means, strength, definiteness and perpetuity. Truth in the abstract might be grasped by higher intellects, but incorporated in a perfect Being, it can be comprehended by the feeble as well as the strong. The love of truth in nature has led men to renounce ease and honor and wealth. The love of truth, as materialized in Christ, has led men and timid women and tender youth to bloody death as joyfully as a lover hastens to his bride. Both nature and grace can point to a noble army of martyrs.

Christ says, "if thine eye be single thy whole body shall be full of light." It would make a splendid motto to be written over the door of every physical laboratory. Simplicity is the badge of the Christian. "Ye cannot serve God and Mammon." The way to life is very narrow. It admits of no meandering. Vacillation must seek a broader way.

Can there be any irreconcilable differences between two schemes which speak thus with one voice, as to the things which are most essential in each? Nay! are we not wrong in calling them two schemes?

The Syrian shepherd, watching the stars, would, if asked for the brightest of the host, describe its lustre, color and place precisely as his unknown brother would do who looks out from Virginian hills. The reason is obvious. They are looking at the same star.

May it not be that the Christ of the Bible is in the material world as its director and support? May not the natural and spiritual systems be only two provinces of one kingdom, with one code of laws, and one formula of citizenship? May it not be that he who does good work in science does Christ's work? If so, the scientist, though Christ's enemy, is in an important sense working for Him, as far as his work is lasting. This removes a serious difficulty. While nature demands of her votaries the great cardinal virtues of Christianity and while it cannot be denied that the profoundest culture of nature fosters these virtues, yet we do not discover in her system any energy by which they can be created where they are not, or substituted for their contradictories, pride, unbelief, love of error or insincerity. In Christianity this very thing is done. She claims and shows a power which nature does not pretend to have. If nature be an independent kingdom, here is a confessed imperfection. If she be a part of one kingdom with Christianity, the imperfection does not exist, for it is supplied in the constitution of the realm to which she belongs.

In closing we shall reply briefly to two obvious objections to these views.

1. "The qualities enumerated do not seem to be necessary to scientific achievement, for many scientists of fame are arrogant, sceptical and lovers of their own hypotheses more than lovers of truth."

We reply. So are many professed Christians. If the faults of Christians do not disprove the Christian scheme, the similar faults of scientists do not contradict the tenor of science. We should judge of both schemes by their best types. I aver that the profoundest scientists are humble and truth loving.

2. "If the above views are true, Christians should make the best scientists," says the objector, "and this is contrary to experience." We admit the inference but question the assertion of fact. Let us remember that science is concerned immediately with the intellect, and only indirectly with moral qualities, however important.

On the other hand Christianity aims at the heart, and uses the head to reach the heart. A scientist may have excellent

moral preparation and yet, if he have a weak mind, he will achieve nothing. If he have a keen intellect, he may do good work though he exhibits in other relations serious moral defects. These admissions do not reach the essence of the question. Granting them, it may still be true that the penetralia of nature are only entered by the capable intellects which are coupled with humble, believing, sincere and truth-loving hearts. In this connection a glance at history reveals some striking illustrations. Let us look to our own century, the age of invention and the arena of the greatest triumphs of science, and first to the science of electricity, with which the world is ringing. In its long list of distinguished men (to speak only of the dead), two stand far above the rest, the one in experiment and insight, and the other in theory, Faraday and Maxwell. The latter bore somewhat the relation to the former that Laplace did to Newton. Faraday found out, 60 years since, the law which has given us the telephone, the dynamo, and the electric motor. Lesser men have acquired huge wealth, or rank, by the application of a truth discovered by him, who chose to die poor and untitled. Another of his discoveries bids fair to modify fundamentally the prevailing views of light. Faraday "stood before kings," yet on Sunday he would be found in an obscure room in London preaching the simple Gospel to a little company of plain Christians. Maxwell, of whom the strongest men of our times speak with impressive respect, was a devout believer in Christianity. Both of these great men showed a sweetness and purity and simplicity that won the tender regard of even the sceptics among their associates.

In the department of light, in which this century has witnessed remarkable advances, no name, among experimentalists, is more distinguished for the number, variety and importance of his observations than Brewster's. He had a harsh and rugged discipline in youth, and to the world his manner often conformed to his training. His doughty, trenchant way of dealing with his opponents and critics may be largely attributed to the influence of his early conflict with poverty. Yet beneath the rough exterior was a loyal loving soul. In old age, as so often happens, his Christian character developed in tenderness and charm. Few

narratives are more delightful than the one which we owe to the filial piety of his daughter, Mrs. Gordon. Standing by his death-bed she said to him:

"You will see Charlie."

Gathering himself, he answered, after a pause:

"I shall see Jesus, who created all things—Jesus who made the world—I shall see Him as He is."

Under a sculptured window of "fair Melrose" Abbey in a white marble tomb sleeps the mortal form of this great philosopher. On the base of the tomb is this legend: "The Lord is my light."

THE RELATION OF PEDAGOGY TO CHRISTIAN PHILOSOPHY.

[Read before the American Institute of Christian Philosophy, March 14th, 1889.]

By Jerome Allen, Ph.D.,
Professor in Pedagogy in the University of the City of New York.

INTRODUCTION.

THE present in the logical result of the past. Those who have gone before us and those who are with us, are one. If our education has brought us into unity with all the good, we have learned to some purpose. If it has not, it has been incomplete. But the individual is not one in the same sense that the race is one. Each is a whole, but each is not a whole in the same sense that the race is a whole. No individual is a union of parts in himself in the sense that each individual is a part of the race. A father has many sons; each one is independent; conscious of having an individuality; but the higher self, which is lived in common with the family, is far more important than the individual self. Thus it is that the family is more valuable than the individual, and the state more valuable than the family, and the whole universe of living beings more important than all the states of earth.

The individual thought of a single man is of little value, but the totality of the thought of the race is of infinite value. An individual by himself can do but very little to elevate the race, but this one when added with other individual ones forms a whole so great that the Son of God thought it not unworthy His glory to die that He might save it. Christ's motive would not have been as great as it was had He died to save one individual. He could have died to save one, but He did die to save the race, and just so far as the race is saved is the work He did complete and perfect.

The object of the study of educational philosophy is to clear, confirm, animate the spiritual self so that it may realize its social

self for thinking, feeling, and doing; in other words, to understand its social influence. But no individual can study this philosophy unless he knows himself, and just to the degree in which he does know himself just to that degree will he understand his tribal self, for every individual is a microcosm—an atom, true; small, it is granted; of little value, it must be admitted; important in its individual capacities and needs, but grand when united with other atoms like itself. This then is the first step in studying the philosophy of educational history.

The individual self must know its points of contact with other individuals like itself, and feel "I am a man, and nothing that is foreign to man is foreign to me." There are those who live within themselves, but they live unprofitable lives. There are others who live in the race. They rise to a higher plane and are prepared to understand the motives that have actuated society in the past and in the present. Now the knowledge of the social self is far more necessary to the understanding of history than the individual self.

But the student of the philosophy of educational history must understand his soul and mind as proceeding from God—as one with God. In other words, he must realize himself as a child of God. This conception of the unity of the soul with God is the highest conception that man can get of his relation to the universe. When any individual recognizes that his peace, his joy, his life, is bound up with the peace, joy, and the life of God, he will act and live in accordance with this recognition. This is the very philosophical essence of Christianity. A pure, earthly, childlike relation is here exalted into the heavenly, godlike and eternal relation. The individual self rises by degrees to his tribal self, and then by higher degrees, when enlightened and filled with the spirit of God, to his godlike self. Then is the soul in union with Him who is the soul of all history; with that Spirit that breathed upon a vast abyss of chaos, spoke matter into existence, and brought the cosmos into harmonic relations. But know that this union with God must be through the Son of God. There is no way to the Father but by the Son. It is not theism, but Christianity that gives us the conviction of sonship. However high Greek thought rose, however sublime

the ideas of Plato reached, however high Neo-Platonism ascended, they never reached the height that the Christian reaches when he realizes that in God, through Christ, is eternal life. In view of these facts the student of the philosophy of history understands "that the infinite is represented in the finite, the eternal in the temporal, the heavenly in the earthly, the living in the dead, and the divine in man." When the disciples went into all the world they were consecrated to the preaching of this truth.

The student of history becomes by an easy transition the student of nature; for the same method that has been pointed out in studying history must be followed in studying natural objects. God is immanent in His works and the devout physicist when trying a crucial experiment feels that he is but asking God a question. The philosophy of history also shows the student the divine order in the arrangement, not only of the physical, but of the moral and spiritual and political world. All events proceed according to law; just as the attraction of gravitation is the law of the physical world so is the presence of the infinite directing mind the law of the procession of the centuries.

It is easy now to show where the philosophy of pedagogy can be found; not in the study of isolated facts, but in the study of the connection of forces as related to successions of organized societies. Thus pedagogy divides itself into three parts:

I. Historical;
II. Psychological;
III. Methodological.

These follow each other in natural order. In order to understand what the teachers of the race have been, and how other minds have been influenced, and what have been their methods, the history of the race must be studied. Facts come first in all scientific investigation. When facts are arranged in proper order, method is found, and when methods are properly arranged, so as to lead to fixed conclusions, the science of method appears. He who attempts to study the science of method, without knowing the facts of history or the laws of mental and spiritual action, is studying to no purpose. He will be sure to draw wrong conclusions. This is the reason why so many students of methodology have come to erroneous conclusions. They have not pur-

sued the right order. *Order is everything.* Put the child, for example, at the end of arithmetic to work toward its beginning, and what boy could overcome the mountain of difficulties that would rise before him? But let him commence with the simple elements and grow step by step, day by day, into the intricate from the simple, and he soon finds that the complex is made up of simple and what appeared very difficult is made up of an infinite number of simples.

I.—THE HISTORY OF EDUCATIONAL THOUGHT.

Now what does the thorough study of pedagogy include? First of all, it takes note of what has been done by teachers of the past. As scholars we do not stand alone. Not only are we citizens of the world *as it is*, but of all time; the literature of antiquity as well as of the Christian centuries is at our command. We study the thinkers in the past and find out how their thoughts have influenced the work of men. What these thoughts are and what these works have been it is the scholar's duty to know, for there is no advance out of the present into the future but from the past. It is only the fool who turns his back upon all that has been done, and shuts his ears and closes his eyes so that he may not know what the deeds of the fathers have been. Such a one cannot in any sense be called a scholar. But he who wisely forecasts the future, knows the past; as his vision widens and as his eye grows clearer he is better able to judge from what has been done, to that which must be done. It follows then that the work of properly educating the present generation must take into serious and careful account the mistakes and successes of others. The study of historical pedagogy does not take into account so much when great men were born—or the facts concerning their lives, but it is careful to show how their thoughts have influenced the generations of men. There have been great lights that shine to-day like stars showing that they were suns of systems. Much that these great men said and did we must reject, but yet much will remain to the latest times. Confucius, Gautama, Socrates, Plato, Aristotle, Zeno, as well as hundreds of others have left indelible impressions on the tablets of human hearts and minds. *What the world has been, has been due to educational*

thought. Wise men have talked much concerning the methods of child-training. *Now* the scholar asks, What *kind* of training was this? What did Lycurgus recommend? What Plato? What Cicero?—Quintillian?—Seneca? What were the educational doctrines of the Christian fathers, the reformers, and the masters of the last century? What did these doctrines accomplish? The generations of the past were what the teachers were. No stream can rise higher than its source. How high up in literary and moral excellence have these sources been? *No one has any right to take into his hands the serious work of training a child unless he knows what serious men have thought and done in the days past.* The glory of our day is the result of accumulated thought, which has grown by its own inherent force and strength. Thinkers and workers of one age affect the thinkers and workers of the next, *and it is the scholar's duty to know what these thinkers and these workers did.* The botanist carefully studies the history of plant life; the geologist traces the succession of rocks from the early azoic to the most recent alluvium; the paleontologist more minutely than the general geologist studies life from the first to the present with all its succession of fluctuations and changes. In every department of scientific investigation the past is appealed to as showing the method of God's thoughts, as well as man's thoughts. How much more important it is that *he* should know the minds of men, who is to touch the forces that are to rule the future generations of mankind. How important it is that he should be well informed in reference to the history of educational philosophy. In this view there is nothing more dignified in its theoretical, speculative, as well as immediate and practical bearing on the work of life than the thoughtful study of educational thinkers and systems. This is not the time to make a comparison between the dignity of the history of educational philosophy and the history of law or medicine or theology. But if the comparison were made between these great sciences and the greatest of all the sciences, the science of influence, which is the science of teaching, it would be seen that pedagogy contains the elements of more thoughtful study, more philosophical discrimination and more practical application than any of the great sciences referred to.

II.—THE SCIENCE OF THE MIND.

But there is a philosophy of mind that needs to be understood by the teacher. There is a world within us, as well as without. Education has to do with all the forces of the past in the child, governing its conditions in the present, its first unfoldings, and the laws and methods of its growth. If an infant is the child of God it is also the child of man, and of the race. As a natural object its study must be in accordance with nature, as a growing being, physically, morally, mentally, socially, and spiritually. We should know the periods of its growth, the automatic life of infancy, with strong physical propensities before conscience is developed or the moral faculties are brought into exercise. Then the period of physical activity, with the dawning of intellectual strength, where the very rootlets of influence reach. Here are the feelings, instincts and impulses, imperfectly in action. Here the senses begin their important work. From this early period the child emerges into another, when the larger life commences. The will begins to assert its power, and the brain to grow with unwonted rapidity. With these two stages true education has much to do, although as yet it has done but little, for it has known but little what to do, and the child has been permitted to grow almost at will during this second period of its development. Out of this epoch the child comes into a larger life, and here the school commences its work. It will be observed that before the teacher ordinarily receives the child it has passed through two distinct stages, so that much of the work that is to be done could be omitted provided the proper influences had been brought to bear in the previous stages of its growth. It is in this third stage that the faculties of the mind reach some degree of maturity, and the instinct of right and wrong becomes powerful and controlling. But out of this third stage the growing child emerges into a more mature condition; manhood and womanhood begin to assert their power, thought is enlarged, reasoning becomes more logical, conclusions more certain, the vision broadened, impulses stronger, more fixed, desires strengthened, and the whole mind, as well as the body, turned into more fixed and permanent conditions. It is during this fourth stage that the higher institu-

tions commence and finish their work. But how often is it that the college professor is hampered in his attempts to train the maturing boy by prior conditions of neglect or unthinking culture. How often is it that before the college gets the boy he has unalterably fixed certain habits that already have begun to bear pernicious fruit. At best, the college can do little but supplement what the boy has received in the past. With how much emphasis do our higher teachers use the word *good preparation.* More and more does this expression come to mean something deeper than a mere knowledge of mathematics and the classics. If during the three stages of the child's life previous to this important fourth condition, teachers could know how to touch the springs or human influence and train the mind, soul and body in harmonious exercise, the work of college training would have tenfold added force. It is because, as President Eliot of Harvard has recently shown, so much time is wasted with trivialities in our lower schools that our higher institutions of learning are often not able to do as much to-day, with college boys, as the crude schools of old accomplished. The hardy farmer's son coming from his mountain home with his rough manners and home-spun suit, with his unkempt hair and bronze face and brawny arms, awkward and altogether undesirable in appearance, became under the skilful management of the old professor a giant in intellect, and the stalwart practitioner of all that was true and good and beautiful in life. What did Mark Hopkins do for young Garfield with his yellow hair and awkward gait? Who would have dreamed that in him there was the potentiality of one of the greatest of our presidents? Yet it was because young Garfield's life had not been warped and twisted out of its natural course by its early training, that Dr. Hopkins could do with him what he did. Better a hundred-fold that there should be wholesome neglect than an unwholesome and unwarranted interference with nature's laws. The teacher to-day, if he succeeds, must know the instrument upon which he plays. There is no subject more worthy the careful, conscientious and thorough study of teachers to-day than childhood, nor is it necessary for me to say that the philosophy of this subject is worthy a place in the curriculum of the most dignified

school in the world. To provide for the study of childhood is to provide for the government of manhood. To know the mind of the growing child is to know also the mind of the mature man. To know what forces influence humanity in its infancy is to know what forces will influence humanity in its maturity. The child is a microcosm. In its growth may be discovered the secret of the whole process of education. In every little child are the capabilities and capacities of the race. So when we study educational psychology, we are studying the science of all sciences, the most important in its bearing, the welfare of man, the science of political economy, and sociology.

III.—THE SCIENCE OF METHOD.

We have come to a time when intelligent men are not satisfied with simply being told that they must do a certain work in a certain way—they demand a philosophy for doing. Up almost to the present the world has been contented to do as the fathers did. That time has gone. The stone cannot be placed in one end of the sack and the grist in the other, and both thrown across the horse's back. The stone must be removed, the weight must be lessened, the locomotion must be made easier and more rapid, and this can only be done by investigating the whys and wherefores. Applied to teaching, this means that teachers are not hereafter to be told *how* to teach *but what underlying philosophy must be adopted*, and having this, what natural deductions must be made from it. When these principles are applied, the work is *certain to be on a solid foundation*, and in no other way can the right be made certain.

In all branches of intellectual work principles are sought for. It is not enough to know that a certain way produces a certain result, we must know *why* the result is produced. When three or four or more facts are established, conclusions may be drawn that will lead to fundamental principles. These principles underlie all progress in all departments of study and work. Some underlie the processes of exchange, others the administration of justice and government, the treatment of disease, the duties of man to man, the duties of man to his Creator, and in a hundred other departments principles are recognized and followed in drawing practical con-

clusions. A few months ago the tariff was under the running fire of hot discussion. Profound thinkers are turning their attention to the solution of the problems this question suggests, and already there are many fundamental principles admitted by all which soon will be so increased in number that the thinkers of the world will agree as to what course will most conduce to the prosperity of a country. Now let us make the application to pedagogy. A very valuable portion of our lives is spent in acquiring fundamental knowledge; in learning how to read, to write, to spell and cipher; in studying the branches of a common school education at a time more important in its bearing on after-life than the higher studies of the college course. Let arithmetic be presented philosophically, let geography, reading, writing and spelling be properly taught and the mind will receive an impulse not easy to calculate. We must discover what fundamental principles underlie teaching. There is a philosophy here which teachers should know, *and which if they do not know they must grope in the dark*—doing, because they are told to do, imitators, not originators, followers, not leaders. Pattern work in schools has no element of science in it. If it is the aim of school work to tell the teacher exactly what he is to do to-day and what to-morrow, if each step is to be prescribed so that he, even though a fool, need not err in travelling the road, then there is no place for the science of methodology. But methodology supposes that the teacher needs to study the philosophy of his profession.

There is science in teaching, because there are principles underlying the subjects taught in our schools. It is the work of the teacher of teachers to point out what these fundamental principles are, so clearly that those who see them can make no mistake in their after-life in reference to what is the right course to pursue. The science of method means, that underneath these special ways there are certain philosophical statements of truth that can be ascertained, stated, and followed, and that those teachers who understand what these principles are will have the science of their profession at their command; while those who do not will only be doing things, ignorant as to the cause—only

careful to do what they are told to do, because thereby they earn their daily bread.

IV.—ETHICS AND RELIGION.

There are great moral questions that just now stir the world as it was never stirred before. It is true the minister, as a professional teacher of religion, should be thoroughly equipped with all the weapons that can be used for defending the truth, but the teacher takes humanity in its plastic state and moulds it into the men and women, whom the clergy are to talk to. The teacher's influence is all-powerful at a time when influence tells. It is of the utmost importance then that he should tell his pupils the truth. He will be asked, "Is astronomy true?" "How about geology?" "How old is the world?" "What is evolution?" Young people will be sure to ask these questions, and the teacher must not prevaricate; no one detects uncertainty or hypocrisy quicker than children. And then they will ask, "What do you think about Moses?" "What about Christ and the Bible?" It will not do to say, "Be still, my child, let me rest." Such shuffling will not do, the times demand that with the utmost plainness teachers should touch the great questions in religion and politics *and teach them in the public schools*. The time was when this was done, and the time will be when it will be done again. Teachers must not only not be afraid to speak the truth, but they must be *able* to speak it on all subjects; politics, science, religion, morals, art, literature, and everything else. We are now pursuing the shilly-shally policy of trying to teach science, literature, and art without touching religion and morals. WE SHALL NOT SUCCEED. And so we say that just now nothing is more vital to the very existence of the country than this question of morals and religion *in the public school.*

The doctrine of some modern philosophers teaches that the world is preparing to get along without religion. This is a natural deduction from Herbert Spencer's philosophy of ethics, and in accordance with Mr. Huxley's remark in his article on "Science and Bishops" in the November *Nineteenth Century* of last year, in which he says, "That Christianity is doomed to fall, is to my mind beyond a doubt." In a recent address of Charles

Kendall Adams, President of Cornell University, he says, "It is a fact, alarming as it is obvious, that there is a growing cloudiness of public opinion as to the real difference between 'ought and ought not.' This evil, and I think it is one of stupendous magnitude, can be corrected in the family and in the schools. The churches cannot reach it for the twofold reason that at best they reach only a portion of the community, and in general they have to do with religion, which, however closely related, is nevertheless something *quite distinct from moral obligation.*" The Church to-day is called upon to meet this charge of fostering a neglect of morality, and the charge can only he met by providing the means of knowing the philosophy of religion by those who are to teach others what the basis or moral obligation is.

There are thousands who are continually subjecting what they call religion to what they call science. The teachers of our country must be instructed to know what each is and to give to each its own place. As Dr. McCosh says, "We should give to science the things that belong to science, and to God the things that are God's. When a scientific theory is brought before us our first inquiry is not, whether it is consistent with religion, but whether it is true. If it is found to be true on the principle of the inductions of Aristotle and Bacon, it must be shown that it is consistent with religion on the principle of the unity of truth." All teachers, especially those who are leaders among teachers, who are principals in our schools, and professors in our higher institutions, should know *how to investigate a truth.* If we fail here we shall fail everywhere, and all that is worth living for will be gone.

No question has a more direct bearing upon the moral welfare of the individual than the correct understanding of the terms "right" and "wrong." A few months ago an author wrote in his copy the old statement, "The rights of man are in a middle" and the printers had it "The rights of man are in a muddle." This misstated sentence expresses the philosophy of a part of mankind. People get wonderfully confused whenever they try to make themselves believe the philosophy of the fool. So they do not affirm that there is no God, only that the first cause is unknowable, not believeable, and therefore unthinkable. "Of

what use is such a God to us?" they say. "We'll call it force and cast it among the rubbish of philosophy along with other unsolvable problems of no practical value to the world." These reasoners deny nothing, worship all the gods, and praise Christ as among the best of His genus, and select from the Bible what suits them as good, and reject what seems bad. They form libraries of Bibles in which the Scriptures hold an honored place, but only as one among many of its class.

This commercial age wants a God to suit the demands of the times, especially the wants of such commercial centres as ours. The old ideas were good enough for camel trains, slow coasters, but are far too antiquated to suit the methods of doing business in New York. People do not want a moral code that interferes with their dealings in stocks and making a corner in wheat and coal. Carlyle's account of man is about right when he says, that "If you want to awaken the real beliefs of the average Englishman descend to his stomach, and purse." It must be admitted by all that the uplifting moral force found in the school-rooms of our country should be strong. We have seen enough already to show us the danger of sending into the world educated agnostics. The great teachers of the world have all been great moral teachers and each has had his philosophy of ethics. That this is true we only need to refer to the systems accepted by the civilized world before Christ—the Peripatetics, Academicians, the Stoics and Epicureans, as well as the Eclectics. We have now a Christian philosophy of ethics. The other day a prominent politician confessed that he knew that buying votes and selling manhood was practised at every election in a certain district in the city of Brooklyn. He told how much was paid for votes and how the men held their tickets as they passed before the polls, and how they went to a certain corner, ostensibly to a stand, and received a stipulated sum for the vote they cast.

It is not necessary to multiply instances to convince you that not ethical and moral, but religious and Christian teaching must be found in every school. Spiritualism will not save us, agnosticism will not save us, nothing but free, tolerant Christian philosophy can save us; in this alone is our safety. It needs no argument to convince you of this fact.

V.—SHOULD A UNIVERSITY TEACH PEDAGOGY?

I have shown conclusively, I think, the necessity of the teaching of the History of the Philosophy of Educational Thought, the Science of the Human Mind, the Science of Method, and also the Science and Art of Right Doing and Thinking. The only remaining question is, Is it a necessity for a university to establish a special School of Pedagogy? Are not our great State normal schools doing this work sufficiently well, and can we not give to them our influence and strength? There are two answers to this question. The first is, that the State normal schools are essentially elementary and academic institutions; they are required to teach the facts of the branches taught in the public schools, as arithmetic, grammar, geography, etc., as well as Latin and Greek and the sciences. Much of the time of these schools is consumed in this work, and it is a fact that for many years it will be necessary to train normal students in the routine work of a good education. The special professional part in these schools is found in their training classes, and is of necessity elementary in its character. There is little time given to the study of the history of educational thought, the science of ethics, methodology, and the science of the human mind.

And then again it has been found impossible for State schools to teach Christian philosophy. Unfortunately, since they are supported by public funds, the public demands that the instruction shall contain nothing objectionable to any class or sect. The Christian ethics taught by Protestants would not suit the Catholics, and that taught by Catholics would not by any means suit the Protestants. Any kind of Christian ethics taught in the schools would offend the agnostics and the Hebrews, and then there is a large class who demand that all sort of "religious" instruction, as they call it, must be banished from the class-room. Their theory is that the school is established for the purpose of instruction in the branches of a common education; that it has no more to do with religion than it has with Chinese. They say that the Church must keep its hands off from the public schools. This party constitutes a large class. A very considerable portion of the teaching element in our schools hold this doctrine and constantly ignore all reference to any kind of ethics, let

alone Christian philosophy. There is another class still that claims that morality should be taught in the public schools, but that it must be of the kind that was taught by Cicero in his "Offices"; in other words, morality must be taught *de natura*. They say that the light of nature gives us sufficient knowledge to guide our conduct, and that if there is reference to the Bible there must be also reference to the Shastras and the writings of Confucius, and all other good books that the world has accepted as containing moral codes.

To-day the whole question of moral teaching in the public schools is in an extremely unsettled condition, and there is nothing so much needed as instruction in how to train pupils in morality and religion, and a Christian university is just the place in which this teaching can be best offered. The time is now auspicious.

VI.—SUMMARY OF THE ARGUMENT.

I have endeavored to show the necessary relations of pedagogy to philosophy. Necessity, it is said, knows no law, but here it knows three laws: (1) the law of man's higher relations, as an heir of all the ages, and a child of God; (2) the law of the human intellect, sensibility, and will; (3) and the philosophy of method. It may be said that here we have the philosophy of all the sciences. Granted it is so; then since the greater includes its parts it must include the science of pedagogy. But the relation of philosophy to pedagogy is *not* a part of other sciences; *it rules all other sciences*, for pedagogy is the science of human influence, not only in the school-room, but everywhere. The physician owes much of his success to a knowledge of it, the lawyer before the judge and the jury frequently gains his case because he understands its laws. The orator on the public platform moves the minds of his hearers in the direction he pleases because he knows how to touch the springs of influence, and the preacher in the pulpit strikes the keys of this mighty instrument with wonderful skill when he brings his hearers out of their convictions into sympathy with his. But above all, the teacher is indebted to the knowledge of this science and art for his greatest success. He who knows metaphysics cannot always make others know as he knows, for the avenue to the intellect and the will is

through the sensibilities. He who has the best knowledge has the most feeling. The knowledge of the sciences, the languages, the arts, in all departments of human learning must touch sensibilities in order to bring the intellect and the will into their best activities. Knowledge of abstract facts will not give this science of influences; therefore it is that the teacher must know far more than the topics he is to teach. This philosophy of pedagogy, then, is higher than any department of information studies, for these deal with the intellect, while this deals more with the feelings. He who knows as he ought to know, feels deeply. The greatest of mankind have been men of the deepest sensibilities, because the mind has been touched in its three departments. But these sensibilities must be trained right, or else their fruitage will be apples of Sodom. Byron had intellect, and a will, but his sensibilities were not properly educated. Had they been, he would not be classed with the Satanic school of poets. The grandeur of Milton is not so much in the intellectual imagery of "Paradise Lost" as in the depth of feeling he throws into his pictured representations. But higher than all this, the philosophy of pedagogy teaches how we may live the life of true philosophers. The child is as really a philosopher as the man. Every matured purpose is the fruit of some sort of consecutive reasoning. This is as true of the lower animals, to a certain extent, as of man, but in the mind of man, in its best condition, we find a high development of philosophic thought. The motive rules the character of this philosophy, and therefore it is that I have insisted in this paper that the *science of motive* is the most important of all the sciences, not only for the physician, the lawyer, the orator, the preacher, and the man of business, but for the teacher of the young.

Let right motives be firmly established in the minds of growing childhood and the mature manhood and womanhood will not go far astray in its philosophical deductions. To-day a portion of the world is running mad after the modern school of immoral development. So far has this evil gone, and so arrogant has it become, that it claims to rule out of the entire universe the presence of the Infinite. The remedy for this immoral philosophy is not in reasoning processes, but in motive power.

There is a reason why these agnostics desire to banish God from His universe, and this reason is back of their philosophy—they do not want God—and they try to believe there is none. They do not want the Bible, and they try to banish it. They do not want the Church, and they try to wipe it out of existence. But touch the motives of growing children, and bring them up in a right line of thinking and acting in all our schools and all our families, and in one generation the agnosticism of the atheistic development hypothesis will be a matter of history and not of present existence.

FIVE POINTS IN AN EVOLUTIONARY CONFESSION OF FAITH.

[Read before the American Institute of Christian Philosophy, February 7th, 1889.]

By Rev. Anson P. Atterbury, New York.

A CONFESSION of faith is a serious matter. I look with awe upon a little volume, bound in sheepskin, standing in my library; on the back are the simple words "Confession of Faith." It is that weighty document the title of which is usually specified with the prefix "Westminster"; and the doctrines yellowed, if not mellowed, by age are significantly indicated by the color of the binding without. Whenever I look towards it, or reach my hand to take hold of it, I feel like making that reverential little "bob," which our Roman Catholic fellow Christians are accustomed to make as they enter a church dedicated to some one or other of the more or less holy saints. Were it convenient to have a receptacle for holy water standing near me in my study, as it always stands in the entrance of such a church, I should be tempted to sprinkle a little of that blessed article on occasion of my approach to the venerable volume of which I speak; partly, however, to lay the dust.*

But it is not merely its antiquity that gives me such a reverential tremor as I look towards that yellow book. Age forces respect only within certain limits; sometimes it excites the opposite of reverence. Were the thoughts contained in that volume really in their autumnal "sear and yellowed leaf"—were the thoughts as well as the pages, faded—I should not feel that semi-superstitious awe of the book. It is because therein is an expression of living and vital belief—on the whole the most clear, most logical, most deep, most forceful expression of human belief concerning the truths which are within and beyond man.

Any belief is divine; at least the power to have it must be of

* It is due the reader and the Institute to know that Mr. Atterbury is a Presbyterian.—[Editor Christian Thought.

the "image of God." Think what it means to believe something. The mind has grasped a thought; has weighed that thought in its invisible, sometimes inaccurate, scales of judgment, and says to itself that the idea is true. Soon, if that thought be a strong, central one, it colors all other thoughts around it. The source of all action is controlled by that belief. The thought forces itself out into every action and incident of the external life. It spreads its life and influence, as the micrococci reproduce themselves, infinitely. The soul is ruled by these thoughts. A serious and central belief—of what infinite importance it is!

Emerson has said somewhere "The ancestor of every action is a thought." We may perhaps add—every thought, really taken into the mind, is surely the ancestor of innumerable actions. A carefully considered, deliberately accepted, consistently followed system of belief is a god set up in the soul.

Forceful, beautiful, sometimes unbeautiful, have been the beliefs of men through the past ages. From their "confessions of faith" have flowed human history. But now a great modification of much of the old-time faith is suggested—they say, forced—by the marvellous discoveries or rediscoveries of modern times. If these modifications are accepted, as the old thoughts have controlled, so the new thoughts will modify, human life greatly, eternally. Much will result from an "evolutionary confession of faith," if it shall be accepted by men.

At the outset let me emphasize two points which will enable us better to understand what may be said. The first one is that faith in any system of doctrine is a matter of probability, not of certainty. There is no belief against which nothing can be said. The balance of probability weighs down on one side of the question; you accept that, and act upon it—that is your belief. Further; there are varying degrees of probability, as we determine our beliefs. Some points in a "confession of faith" we may hold more positively than other points therein; though we accept it all. We think them probable enough to assert them and act upon them. That is all; but that is belief.

Mr. Sanday, in his book on the "Genuineness of the New Testament," after quoting Bishop Butler's saying, "Probability

is the very guide of life," goes on to remark (page 361), "With probabilities we have to deal in the intellectual sphere. But when once this is thoroughly and honestly recognized, even a comparatively small balance of probability comes to have as much moral weight as the most loudly vaunted certainty." So we accept the authority of all the books of the New Testament, though the balance of probability is much more strongly in favor of the Gospel of Mark than of the Second Epistle of Peter. We accept both sufficiently to act on this belief. This matter of belief as resting on balance of probability, even varying degrees of probability, must have a most important part to play as we deal with an evolutionary confession of faith.

The second point to be noticed by way of introduction is, that our object at this time is not proof but statement. In one short paper we can hardly be expected to give not simply questions and answers but also the proof-texts—as was required, to their dismay and disgust, of the children of the olden time each Sunday evening, as the shorter catechism was reviewed. In such a matter as this which is before us the full force of the arguments can be felt only by the few who can go into a minute study of the details. The mind can grow only slowly into an appreciation of the proofs which can be presented. Let it be sufficient here to say that almost all who do go into the minutiæ of the argument and who obtain that mental discipline necessary for appreciating the points, find such great probability as to be forced to yield assent and belief.

But while the details of the proof must be left to other times and other men, much is to be gained by a simple statement of the results of these arguments as obtained by any thoughtful and reverential mind. The mere assertion by an intelligent Christian that he can believe in evolution and Christianity at the same time will do much to break the soul-storms of doubt and apprehension by which so many are beaten; will do much to enlighten those who are struggling along in the twilight, unable to see the pathway for themselves. A mere statement of the points of vantage gained by one mind in the great battle of belief may perhaps serve as hints to another in the fight.

A striking illustration of what we mean has lately been presented in the "Life and Letters of Charles Darwin." Prof. Warfield of Princeton has drawn attention to the revelation which Mr. Darwin there makes of his spiritual changes, a development downward, as it seems to us. He grew up, as most children of Christian parents do, in that beautiful and implicit childish faith which gives the best promise of a strong Christian manhood. What can be more touching than the revelation which he makes of how, as a boy he would attempt to get from school to his home and then back to school in a short time. To do this required the swiftest running on his part. He would pray to God to help him make the distance in the required time, and being a fleet runner he accomplished his purpose. Then he would think to himself how marvellously God had answered his prayer. In later years, evidently, he thought his success due rather to his own powers as a runner, than to divine assistance in answer to his prayer. At the critical point in his life, when but little over twenty years of age, he accepted an appointment to go on the scientific trip of the ship Beagle. For years afterwards he was obliged to devote himself to a consideration of the facts of material science; and this course of study so filled and disciplined his mind as to establish an unshakable belief in that system of scientific doctrine which we call Darwinism. Then came the apparent contradiction between what he thought to be the teaching of the Bible and what, as he felt assured, was the teaching of nature. "He had persuaded himself not only that species originated by a process of evolution, but also that this process was slow, long continued, and by a purely natural development. And he held, with dogmatic tenacity, the opinion that the book of Genesis teaches that God created each species by a separate, sudden, and immediate fiat. If both these positions were sound, it followed necessarily that either his theory or Genesis was in error; and to him, in his naturally enthusiastic advocacy of his theory, this meant that Genesis must go. Now he was ready for another step. Genesis is an integral part of the Old Testament, and the Old Testament is not only bound up with the New Testament in a single volume, but is in such a sense a part of Christianity—as its groundwork and

basis—that Christianity cannot be true if the Old Testament record is untrustworthy. To give up Genesis was therefore, to give up Christianity" (*Hom. Rev.*, Jan., 1889, pp. 10, 11). Could Mr. Darwin have seen that, it is not necessary to believe that the book of Genesis teaches "that God created each species by a separate, sudden and immediate fiat," perhaps he would have kept hold of his earlier idea of God. Perhaps thus a large part of the force of the attack which science has made against religion during the past thirty years would have been avoided. If Mr. Darwin had led science along the line of theistic evolution, which is now being accepted more and more generally as probably the true explanation of the ultimate law of natural facts, how different would have been the history of the so-called conflict between science and religion through the last third of a century.

There are many now in the position in which Mr. Darwin was between the years 1830 and 1840 A.D. On the other hand there is still too much reason for such questioners to think that there is an irreconcilable difference between the teachings of science and orthodox religion. One can hardly open an issue of any religious periodical without reading such unqualified statements as the one which I quote—almost at random: "There are just now three general lines of sceptical attack. First, in science, particularly in biology and metaphysics. By wide inductions of selected facts and the skilful grouping of certain principles supposed to control all activity and all life, science claims to have reasoned out a universe without Creator, Ruler, or Judge." That is all true; but only a small part of the truth: an unqualified statement that, as it stands, is misleading. It does not entirely relieve the matter, when later the author modifies this remark. The young Darwin reading such statements, reiterated frequently, will quite probably be led to think—the question is between science and religion; one or the other, but not both. How little there is to show him the error;—that only a certain use of science makes this sceptical attack—that it is not evolution, it is only materialistic evolution that does this. It is, I believe, a high and holy calling, laid upon those Christians who have been led into the light, to proclaim the evangel

that what science seems to say may be what God has done and said.

Understanding then these two introductory points, that belief is founded upon varying degrees of probability, and that our object is not proof but statement, we make our confession of faith in what is called evolution. But here notice the three different uses of that word evolution. It may mean scientific, materialistic or theistic evolution. Scientific evolution concerns itself simply with the facts which present themselves to one who studies nature. But there is a tendency of the human mind to seek the metaphysical explanation of these facts. We are forced to ask not simply what is the fact, but how is it possible to be explained. Thus compelled to add metaphysics to scientific evolution, we must choose between one of two pathways—materialistic or theistic evolution. It was in connection with an admirable paper read before this Institute August 24th, 1887, by Prof. D. S. Martin, that the editor of CHRISTIAN THOUGHT drew an admirable distinction between the words "evolution" and "development," making "the former to mean that hypothesis which ultimately leads to the conclusion that mind is the product of matter, and the latter to the conclusion that matter is the product of mind." But may we be allowed to suggest that perhaps the terms materialistic and theistic evolution will more plainly designate the distinction that is to be made? As the terms evolution and development have been made practically synonymous by general usage, and as the term evolution has been so generally applied to theistic evolution, the attempted distinction at this time, desirable as it undoubtedly is, may perhaps lead to confusion. I would use, whenever possible, the terms scientific evolution, materialistic evolution, and theistic evolution.

Against materialistic evolution we would protest with all earnestness. The doctrine that "Man is what he eats" is a most abhorrent one. It is moral and spiritual suicide to allow that the self is no more than the matter of which the body is made. To take spirit out of the universe is like taking reason from an individual. It is making a big insane asylum out of this world. Like an eagle floundering in a mud-puddle, is the mate-

rialist—imprisoning himself in clay, when he should be soaring aloft—his soul far above earth.

But we should protest as well against that subtle materialism presented by such books as "The Unseen Universe," and "Natural Law in the Spiritual World." Beautifully designed, but terribly reacting, weapons they are. The spirit and purpose with which they are written clothe with a heavenly radiance thoughts that logically lead into the abyss. Such suggestions are becoming widely diffused, and are eagerly received. Perhaps the explanation of the startling rapidity with which such speculations find acceptance is to be found in these three reasons: the thoughts are in themselves fascinating to the crowds of superficial thinkers in this scientific-religious age; there seems in them the promise of harmony between the two most powerful factors in the intellectual struggle of the time—religion and science; and lastly and particularly, they present a conception of the life beyond that is more or less of an approach to this earthly experience. They claim for the spiritual life much on which the ordinary mind can get hold. However indistinct or disguised the tendency may be, such writers bring matter into the unseen universe, and obliterate the distinction between the life that now is and that which is to come. However the authors of the "Unseen Universe" may disclaim the criticism of "subtle materialism" (page viii), when they say (page 8), "We certainly hold that, if we are to accept scientific principles, one of the necessary conditions of immortality is of a frame surviving death"; when they say (page 199), of the "invisible order of things" that it "is connected by bonds of energy with the visible universe, is also capable of receiving energy from it, and of transforming the energy so received"; when they allow and speak of the "matter of another universe" (p. 200) and say that the minute "motions and displacements" in the brain, which seem to condition memory, are in part "communicated to the invisible body, and are there stored up, forming a memory which may be made use of when that body is free to exercise its functions"—when we hear all this, we are not to be criticised for saying that it sounds materialistic: more deeply—we claim that it is founded on a conception of spiritual life that is essentially materialistic.

Another, perhaps more striking, illustration of this same tendency towards a subtle materialism in the attempt to carry science into religion, is to be seen in that remarkable and fascinating romance "Natural Law in the Spiritual World." The foundation of the whole argument is the assertion that the laws of nature are the projections, into the earthly sphere, of laws that obtain in what we call the spiritual life; thus assuming a correspondence between the two that is essentially materialistic. The doctrine of the eternity of matter is the starting point of many in this line of reasoning; or, for others, is the goal to which they come: and I do not see how this belief can be accepted without a consequent, though gradual, materialization of the whole system of belief.

It is theistic evolution of which we would here speak. Perhaps the best definition is that which is given by Professor Le Conte: "progressive change, under fixed laws, through resident forces." But what are these "resident forces"?

Here comes in our most important assertion. It is in this that we find the necessity for theism. The doctrine of development, as we understand it, involves, proves, emphasizes theism. To anticipate our thought a little: (1) It teaches force. (2) It teaches force working towards an end—the spiritual development of man: thus this force involves intelligence. (3) It teaches this force, thus working intelligently towards an end, as proceeding in its development at a rate unaccountable, unless on the supposition of a will at work with a definite purpose. (4) It teaches this force as thus working towards an end under combinations of circumstances that can only be accounted for on the supposition of infinite intelligence. (5) It teaches this force as working towards a general uplifting of the souls which in the end it has developed. We think that it will be generally allowed that beneficence is shown in the workings of this power.

Force, intelligence, beneficence—that means God.

This is, of course, going much farther than many evolutionists would allow. Mr. Herbert Spencer's idea of the underlying force could reach no higher than a conception of it as possibly an unknowable God. It is not for us here to attempt to show

what seems to us the weakness of such agnosticism. To say that we cannot know God because we cannot know all around Him, is like claiming that we cannot know of the moon because we cannot see its other side.

But the full force of theistic evolution can only be felt as we grasp the doctrine of the immanence of God. This is the foundation of all. It may, perhaps, be stated as follows:

God is within as well as above the material universe. The general idea has been that He works in the sphere of nature only by second causes. But it is becoming generally admitted that all force is, in its ultimate explanation, the exertion of will. Now we claim that all of nature's force is simply the sustained and continuous exertion of the will of the Infinite God. Further; that each incident in this development of this force is the direct and immediate exertion of God's will. We would do away entirely with physical second causes. We would also deny that the human will is an original source of force; it merely takes a little of that continuous exertion of God's will that we call force, and modifies somewhat its application—though in this comes the possibility of human sin. We would emphatically claim God as transcendent as well as immanent. This doctrine is not pantheism, nor idealism, nor disguised materialism. It is the idea that was present more or less definitely in the minds of the old Hebrew prophets and poets. It is the truth that Paul taught as he said to the Athenians, "In Him we live and move and have our being." It is the only satisfying idea of God's working that we can get.

Understanding the meaning and foundation of theistic evolution, let us see the first point in an evolutionary confession of faith:

I. The certainty that this principle has obtained in the sphere of animal life.

I do not see how one can read of the marvellous results of the recent investigations in biology without being overwhelmingly impressed with an assurance that there has been continuous progress under fixed laws through resident forces, the progressive and regular outworking of the immanent God. We call this a "certainty." Remember that we mean only that the

probabilities in favor of this explanation are so predominant that with great positiveness we assert this theory so far as animal life is concerned. We can almost, perhaps quite, see the process of development going on under our sight. Illustrations might be multiplied indefinitely. It is claimed of course that these are mere varieties and not species that are thus produced ; but I would call attention to the fact that some of these changes, produced under man's sight and to some extent direction, are so great that were it not for the preconceived objection that species must not be allowed to possess variability, the results would be recognized as entirely different.

As an illustration of this take the interesting experiments of the Russian naturalist Schmankewitsch. He took a species of crustacea, "which lives naturally in water of a slight degree of saltiness. By gradually raising the percentage of salt this experimenter succeeded in transforming this species into an entirely different one, and by reversing the process he transformed the latter species into the former. Nor was this all. Still further freshening the water, by gradual changes he succeeded in transforming the same species into still another which was so very different from the first that it had previously been ranked as a distinct genus. These changes took place slowly, several generations being required for the individual transformations, showing that the individual variations were transmitted from one generation to another, increasing in importance with each generation. All of these species had been known before, and had always been considered as distinct species and genera" (Conn, "Evolution of To-day," p. 26).

But that the principle of development has obtained in the sphere of animal life is perhaps rendered more clear by the evidences afforded by fossil deposits that throughout the past similar changes have been produced. Read the "story of the rocks" as during the past years it has been unfolded ; I think that an unprejudiced mind carefully studying the record will be forced to say that the various species have been developed step by step from previous forms of life. Let me merely refer to the fossil remains which have been discovered in a lake in Wurtemberg ; strata are there which are evidently deposits from a small

lake of tertiary times. This place is extremely rich in fossil shells especially of a certain species. Mr. Hyatt has made a careful study of this deposit. "In passing from the lower to the higher strata the species change greatly and many times, the extreme forms being so different that were it not for the intermediate forms they would be called not only different species but different genera. And yet the gradations are so insensible that the whole series is nothing less than a demonstration in this case at least of origin of species by derivation with modifications" (LeConte, "Evolution and its Relations to Religious Thought," p. 237).

Were there time we should be glad to dwell upon the marvellous indications of this same truth, probability mounting upon probability until what we may call certainty is arrived at; as we look at the homologous organs of different animals; as we view the startling presentations of embryology; as the hints from geographical distribution are presented; as we dwell upon one and another of the other arguments by which this point may be sustained. Evidently the immanent God, pushing on through progressive changes under certain laws, has seen fit thus to develop life.

Under certain laws, but what laws? Mr. Darwin thought that natural and sexual selection were two laws under which, if the forces of nature should operate in accordance with them, the origin of species would be largely if not entirely explained. But, as Professor Conn puts it: "This merely asserts heredity, and offers no explanation of the fact. Further, there is utter failure to account for the variations which it needs. Natural selection works entirely by the selection of variations, but is itself unable to account for a single one. It can originate nothing. The supposition of mere chance variations is not sufficient." Much else of difficulty can be suggested. "Darwinism," understanding by that term the two laws which he especially emphasized, is not sufficient. Undoubtedly these two laws have their place; but it is beginning more and more to be recognized, especially by what may be called the American school of evolution, that these laws are not the most important of those under which the process of development has taken place. Another law is suggested, that

physical environment determines the results. Again, the law of use and disuse. Evidently heredity has much to do with the process of development of life. But all these laws are little more than mere suggestions. Doubtless in time the mind of man will penetrate much more deeply into the mysteries of the laws which have governed evolution. Only notice this point, that the earnest discussion as to what are the laws under which development has proceeded and the doubt and ignorance as to these laws do not alter the balance of probabilities as to the fact of evolution itself. While we can do little more than guess at the laws, we would still assert the surpassing probability that this principle has obtained as a fact in the sphere of life.

In thus asserting the first point in our confession of faith much is involved. The great objecting point of anti-evolutionists, that species are invariable, is thus given up. The dam which holds out the flood of evolutionary speculation is broken. Has all life come from some small protoplasmic germ or germs? Probably. Are human beings descended from apes? From some lower form of life—at least so far as their bodies are concerned. Is the Bible account correct? Yes, surely. Does it not say that man was created in an entirely different way? No! Men have thought so, as once they thought that the first chapter of Genesis meant literal days; but we understand that marvellous chapter differently now. But how about the creation of Eve? The Bible story is true; but on this unexplained point, as on other points which now we think we can understand, we may not know what the Bible really says. God wrote that story, directly or indirectly; and it is true.

II. We reach the second point in our confession: the probability that this principle of development has ruled throughout the sphere of matter.

We have spoken of our first point as a certainty; we speak now of a probability. We mean that the balance of probability does not seem so overwhelmingly preponderant in connection with this second point as in the first. I accept, believe, act upon this second assertion, as I do concerning the statement that what we call evolution has been the ruling principle in the sphere of life; but the proof to me is not so clear, the idea is not so

readily acceptable in the one case as the other. Yet the varying degrees of probability do not alter the fact that both may be of the confession of faith.

We spoke before concerning the sphere of animal life ; we say now that there has been continuous progress under fixed laws, the outworkings of the immanent God, throughout the whole history of matter, including its connection with life. The authors of "The Unseen Universe" write, "Our modern knowledge enables us to look back with almost certitude to the time when there was nothing but gravitating matter and its potential energy throughout the expanse of space—ready, as slight local differences of distribution predisposed it, to break up into portions, each converging to one or more nuclei of its own, and thus forming in time separate solar or stellar systems" (page 128).

From the primitive star-dust, or whatever may have been in that beginning, when "God created the heaven and the earth," onward by slow, majestic progress has the Almighty pushed matter by His indwelling force through the various stages of perhaps nebulous condition and then hardening earth crust until matter could be used by the indwelling force in connection with what we call life ; then on and on did the divine power work, as we have seen in our first point.

Hints of the reasons why we accept this probability and make it of our confession of faith might be given ; but it is for us now simply to state this point. How majestic a conception it is ! the immanent God rolling Himself out through the ages ; the geologic periods one after another as successive steps taken by the immanent power to make matter fitted for life, and for higher and still higher grades of life ; then the environment of life by matter, each incident thereof being the careful arrangement of the infinite One above and within ; and so on and on through the the whole history of matter arranged for life and connected with life. The whole conception is one worthy of our God, is the only one worthy of our God. "To myself," writes Dr. W. B. Carpenter, "the conception of a continuity of action which required no departure to meet special contingencies because the plan was all-perfect from the beginning, is a far higher and nobler

one than that of a succession of interruptions." (Quoted in *Presbyterian Review*, IX., 578.)

To many, perhaps to most, the idea that development has ruled throughout the sphere of inanimate matter will seem perhaps more sure than that it has ruled in the sphere of life. But to me it has appeared to be the second not the first step in the progress of the argument for theistic evolution. This may be partly because it is in the sphere of animal life that the greater part of recent scientific investigation has been spent; indeed if any absolute proof can be claimed for evolution, it is only here. Further, as we see life-force working, we can the more easily understand how it may be the immanent God pushing Himself out in connection with the matter which He has created, and urging all onward and upward towards the divine ideal. But as we look on inanimate matter we find it harder to break away from the old idea of God as working on matter from without, of exercising His power arbitrarily and catastrophically; we are the more apt to miss the conception of the divine progress throughout. I think that the argument for theistic evolution is strengthened by making this the second step.

So take the second point in our confession of faith. We believe that by orderly development the immanent God has manifested His power in the production of the various and successive stages of animal life and of material existence as well. We go back to that condition of spiritual existence before man was created, before time—at least earthly time—began; then we think of the infinite, yet immanent, God as making this orderly and majestic progress, step by step rearing a stupendous ladder with its foot hidden in chaos, and its top lost to our view in the heaven above; and up that stupendous stairway He mounts, taking our souls with Himself.

III. We reach the third point in our confession, the possibility of certain accessions to the *apparent* force at work in the process of development.

I call this a possibility; yet it seems so probable as to be a part of belief. Notice the word "apparent" in the phrase "special accessions to the *apparent* force at work in the process of development." We have claimed throughout that the infini-

tude of the immanent God is not contained in the matter which we believe to be pervaded by His will; though it is Himself who is working. He is transcendent as well as immanent. He has chosen to limit His working, at the same time showing His orderliness and greatness by proceeding along the lines of certain fixed laws. During the earlier stages of the process of development, as the earth at first "without form and void" was made to assume gradually its shapeliness and beauty and usefulness for the environment of life, the apparent forces at work were those natural ones which even now we can see working so powerfully in the realm of inanimate matter. When life was introduced, the apparent physical forces were, perhaps we may say, increased by the addition of what we may call vital forces. When the spirit of man was introduced, the apparent forces at work in the process of development were increased by what we may call spiritual force. For it seems impossible to make men in general believe that life came from matter, and that spiritual life—man's peculiar attribute—was developed from mere animal life. There seems an essential contradiction.

It hardly needed the absolute failure of the attempts to prove, or even render probable, the doctrine of spontaneous generation to make the intuitive judgment of man pronounce against such a thought as this, that life is only another form of inanimate matter. I think that this is evident concerning the spirit of man as well: the instinctive sense of superiority to the brute creation makes men in general say that he is something more than beast. Professor Le Conte seems to allow (see "Evolution and Religious Thought," p. 295) that life may be developed from matter, at least that the spirit of man may be an ordinary development from the lower forms of animal life. It may be that in the end it will be proved that spontaneous generation of animal life is a truth, and that spiritual life has come from animal life as the monkey has come from protoplasm. It is not necessary to our most cherished beliefs in God and the Bible that these positions should be disproved. Yet I do not believe them. Men in general do not, and I think never will, believe them. There is something so essentially different in organic from inorganic matter, and in the spiritual life of man from mere animal life, and

the probabilities of some special accession to the forces thus far at work in the process of development seem so great, that I assert as a feature in an evolutionary confession of faith the possibility of these special accessions to the apparent forces at work in the process of development. By this I mean that the immanent God exerted His will differently, additionally and permanently at these points in the process of creation and development.

The writers of "The Unseen Universe" have said, "Now we believe that an extension of purely scientific logic drives us to receive as quite certain the occurrence of two events which are as incomprehensible as any miracle; these are: the introduction of visible matter and its energy, and of invisible living things into the universe." They make two points at which this special and, in a sense, additional manifestation of divine energy was made—the creation of matter and the creation of life. I would add this third point—the creation of the human spirit.

Yet I should hardly venture to assert with too great positiveness that there were only these three points at which God thus peculiarly manifested Himself. Others assert several additional points. Dr. McCosh makes many. In a sense every incident in the whole process is practically this. But I think it is sufficient to suppose only two points besides the creation of matter but coordinate with it—the creation of life and of the human spirit.

Some may say this is not evolution—that development in this sense would be in violation of the law of continuity. Let me reply first by quoting names. Professor Gray has said: "Special creative act is not excluded by evolutionists." Mr. Darwin himself commenced his discussion on development with the hypothesis of four or five distinct starting-points. We infer that Professor Winchell allows a possibility like this. Dr. McCosh, as we have seen, suggests at least six points for this special exercise of creative power, light, life, sensation, instinct, intelligence, the moral sense. Perhaps others could be quoted, though much of this refers to creative act at the start, not during the process of development; but let me answer again, perhaps better, by referring to the doctrine of the immanence of God. As, on this theory, each incident in the ordinary process of development is a

special exertion of the will of the immanent God and yet is "continuous," so at these special points when His plan demanded that He should manifest more of His power, it is simply the working of the same God, adding to the apparent forces at work but not to the real force within, continuous as is God and the orderly outflow of His power. The basis of the principle of continuity lies in the conception of the immanent God; some call that law simply the expression of the divine veracity, and these special accessions to the apparent forces at work in the process of development, which may at first be thought to be a breach of this principle, will be seen to be harmonized by this same conception. It is not an outside power that God calls in as He creates life, as He makes the spirit of man. It is still the immanent God working continuously but additionally.

We have referred to three points in the process of development that seem to require the supposition of a special creative force: the creation of matter at the start, the introduction of life and the start of the human spirit. There is a suggestion from the first chapter of Genesis, which, if it can be established, will be intensely interesting and significant. I refer to the use of the Hebrew word "bara," to create. It has been very generally noticed that there seems to be a marked distinction in that chapter between the uses of the two words "asah" and "bara," there used to describe the process of development from the original chaos to the earth as inhabited by man. Perhaps that distinction may be thus stated: that *bara* is used to create absolutely, *asah* is used merely to denote growth of what precedes. If this meaning of absolute creation be denied to *bara*, at least this will be allowed; however indefinitely the word *bara* may be used elsewhere in the Bible, in that first chapter of Genesis it seems to have a restricted and definite meaning differing from that of *asah*. It should furthermore be noticed that in this marvellous chapter, which, though written at the very dawn of civilization, has so wonderfully accommodated itself to the gradually increasing light of science and human experience that it can only be explained as more or less direct and explicit dictation by God, so marked a distinction in the use of this word would mean something important. Now the especial significance of this use of the

word as applied to our present point of thought is that God uses this peculiar word at these three points which are to us so mysterious and important as apparently to demand the hypothesis of special accession of creative force. For the creation of matter and in connection with the introduction of life and concerning the ushering in of the human soul God seems to say that there was this special act that we call creation. These three acts are co-ordinated. For each He brought in a use of His power that had not before been manifested. Apparently, according to the divine account, as at the creation of matter so at the introduction of life, and so at the making of the human spirit, this peculiar exercise or accession of power was demanded. Again we say that this is not a breach of the law of continuity, for continuity lies in the immanence of God.

There is a point, however, that may seem for a moment troublesome. The three uses of this word "bara" in the first chapter of Genesis are (1) in verse one, concerning the creation of matter; (2) in verse twenty-one, concerning the creation of animal life, and (3) in verse twenty-seven, concerning the creation of man in the image of God. The question arises why it should be in connection with the introduction of *animal* life that this peculiar word should be used. As biologists cannot distinguish between the germs of animal and vegetable life, it seems as if modern science would demand that this word *bara* should be used concerning the introduction of plant life in the third day instead of animal life in the fourth day. It may be, however, that on this point, as on many others, it will be shown that the real need for the special accession of force indicated by the word *bara* comes in connection with animal and not plant life. Or, again, the point to be noticed is that in connection with the introduction of life, taking both animal and vegetable together, this peculiar word is used. So the fact that the word *bara* is used concerning the work of the fourth day instead of the third day is not necessarily an objection to our present claim that perhaps the inspired writer of the first chapter of Genesis in this use of that peculiar word meant to indicate what to us seems so necessary, that as at the creation of matter, so at the introduction of life, and so at the introduction of the spirit

of man, there was a special manifestation of the power of the immanent God.

Again, further significance is given to these suggestions for those who believe in the threefold nature of man—body, soul and spirit. There are many who think that man is not simply body and soul or spirit; there are some who think that Paul definitely teaches the docrine of trichotomy. I cannot enter into the discussion; but I would call attention to the interesting coincidence, if it be nothing more, which is here suggested. The trichotomist view is that body, soul and spirit are three distinct elements in the human being. The use of "bara" in the first chapter of Genesis seems to indicate that matter, natural life and spiritual life are three successive stages in the process of creation; and scientific investigation seems to lead us to this assertion, that at these three points in the process of development there must have been peculiar accessions of creative power. Perhaps each one of these lines of suggestion, while in itself it may be not certain, may tend to throw the balance of probability so far in favor of the other two suggestions as to render all three acceptable to our minds.

So this third point of our confession we would offer; but rather as a possibility than certainty. On any theory of evolution the beginning of matter is unaccounted for; besides this there are two gaps in the history which, to many, seem entirely too great to be accounted for by such gradual development from within—the beginning of life and the starting of the human spirit. Nothing can overcome the shock felt by the mind at the claim that there is nothing more in the spirit of man than is in the lower life and that there is nothing more in even the lowest form of life than in inanimate matter. If sufficient time is given, most of the other steps in advance, great as some of these are, can perhaps be accounted for by apparent forces at work; at each of these points a something appears for which, so it seems to many, evolution cannot account. We would not claim that evolution cannot account for the introduction of life and of the human soul—theistic evolution may allow this; we only say that at three points in the history of this earth there seems to have been a peculiar exercise of divine power.

These three points are, as we have said, the beginning of matter, the beginning of life, the beginning of human spirit.

IV. The fourth point in our confession of faith is the presumption that the line of development has now passed from the sphere of matter into the sphere of the human soul and spirit: from physical to psychical and social evolution.

There has been an evolution of matter and of life, but it has stopped. It seems to us so probable as to be a part of our belief that from the beginning the immanent God has worked from within upon matter, has perhaps at certain points manifested renewedly His creative power, first bringing matter up to the point of sustaining life, then bringing life up to the point of sustaining spirit. Step by step we can trace this process, or at least we think we see hints; but suddenly we come to a stop. Since the introduction of spirit into the human body there has been no advance in the development of matter. We look with intense interest on the mummied remains of the Egyptians 4,000 years ago and perhaps more; human bodies not materially different from our own. They are of about the same size as human bodies now; they have the same general characteristics; evidently there has been no change through these thousands of years since the earliest times of which we have historic account. It is proof positive as we look at the mummies of the Pharaohs; but the pictures and sculptures of those times give us assurances to the same effect which would be sufficient of themselves. The immanent God has stopped making advance, so far as our world is concerned, in the realm of matter. The human frame is doubtless becoming modified by the changed environment which civilization produces; but, so far as we can see, it is not being developed into something higher and better. Our human frames are not merely temporary resting-points for the divine work, as were the primitive protoplasm and the successive stages of development above that until the frame of man was produced. We look back and see that God first worked within the inorganic matter of this world until it was capable of sustaining life; then the line of development passed from matter into life. We see also that the immanent God seems to have worked in each successive stage during the development of life upon this

earth, stopping development at each point, except in connection with that particular branch which should lead onward towards the production of the human frame. Here too, as in all preceding stages, the power of development thus seemed to stop. There seems no promise or possibility of any new man or co-ordinate being coming from any other branch of the great tree of life. The body of man is the evident end of the process of material development so far as mere matter is concerned.

But there is evident development in the sphere of the human soul and spirit. Perhaps the connection between the nervous system of the human frame and the spiritual part of man is so close that we must allow a continuance of the process of evolution concerning the brain and the nerves when we claim it for the spirit within. But excepting this possibility it is, I think, allowed by physiologists that no essential advance has been made.

On the other hand advance has been made, and may still be made in the line of the human spirit as connected with matter in life. Men know more now, think better, have natures higher than those of the earlier ages of civilization. Each successive generation is, in those spiritual respects which produce outwardly civilization, an advance upon the preceding. The body of a Shakspeare or an Emerson may not be greatly different from the mummied body of Ramses the Great, but the difference in soul is surely vast; thus, neither one of them could have indulged in the cruelties which characterized the warfare of the great Egyptian general. So also is the difference between the uncultured and cultured of the same period of history; the South African savage is merely an undeveloped American citizen.

We are forced to the conclusion that, as in previous stages of the process of evolution the line of development passed on and on through specially chosen forms of life, the developing power apparently deserting other features of the process, so now that line of development has run into the sphere, immaterial yet so closely connected with matter, of the human soul in its relations with this earthly life. The evident end of the process so far as matter is concerned has come.

Note, in passing, that this is an indication of design in

nature, and that thus evolution emphasizes this venerable argument for the personality of God. The conception of the way in which design is manifested may be somewhat modified, but the idea itself is the more firmly established.

V. A suggestion of indefinite continuance.

If the principle of development has obtained throughout the history of matter thus far, and if its workings have passed into the line of spirit as connected with matter, certainly so long as the present order of things continues evolution will continue. There is no hint that this immanent force is wearing itself out. The sun may be dissipating its energies through space; but the immanent God "fainteth not neither is weary." Perhaps, as Professor Harris suggests, "it is necessary that evolution shall continue in the universe—if it exists now as God's method of working and self-revelation, because the Infinite will want to reveal Himself more and more fully; but it will never be completed because the Infinite cannot be exhausted." This may be going too far; it seems to hint at the eternity of matter—inconceivable, unreasonable; or it projects material conditions into the immaterial sphere, of which we do not know. Certainly so far as spirit is concerned, in connection with matter as it is at present, evolution will continue. We can see no limit at least to possible mental and spiritual development. But we must come to a full stop, and vigorously protest, as some evolutionists attempt to sweep us onward with themselves into an eternal continuance of the process of development, practically making the other and spiritual world a continuance and outgrowth of this.

Thus the author of "Natural Law in the Spiritual World" seeks to see in the great laws under which force has worked in this world little if anything more than a continuance from the past of great principles which hold throughout the spiritual universe, and strives to imagine them as projecting into the spiritual condition beyond. But we object that (1) this makes but little distinction between spiritual life and material conditions. (2) It continues the conditions of time and space into that of which we know but little—and that is only figurative. From all this subtle materialism let us recoil. Doubtless these present laws under which the immanent God has worked in con-

nection with matter project themselves into the spiritual sphere so far as there is anything to which they can be applied; but the conditions of that other life are so figuratively expressed in revelation, are so vaguely to be conceived by ourselves, that we are not warranted in assuming that the spiritual life is enough like ours to make it right to assert an eternal continuance of these laws of evolution. How can we imagine them to apply to a world the light of which is truth, and the atmosphere of which is love?

There is one modification evidently necessary if we would attempt to apply the principles of evolution to spiritual life, that seems to destroy all possibility of an infinite continuance of this process. Earthly evolution, applied to the sphere of life, involves procreation and succession. But we are told by revelation that in the other, the spiritual, condition there is no marrying or giving in marriage, but the souls of the blessed are as the angels of God. Whatever evolution may be possible for the other, the spiritual, life, it can no longer be an advance from individual to individual as is earthly evolution. We are not to suppose that the soul, like the human types of life, is to give birth to still higher types, to which it also shall give place and before which it finally becomes extinct. Any continuance of this process can only be in the individuality of each spirit.

Another consideration may perhaps be of force. There are many who recoil so completely from that subtle materialism which would make the spiritual life little more than a refinement of our earthly life, as at least to want to believe that that spiritual condition into which the soul of man must pass is completely different from all that by which we are conditioned here on earth. Relations of time and space condition our souls as our bodies here; I want to believe that when the spirit of man passes from its human existence it enters into a condition in which time and space do not obtain. Here is a bold leap of the imagination; for indication of what may perhaps be proof, consider the nature of the Infinite God. He is, must be, free from the conditions of time and space. The doctrines of the omnipresence and of the "eternal now" of God are grand beyond all conception. But He made man in the image of Himself,

and breathed this image into mysterious connection with an earthly body. We are accustomed to say that this "likeness to God" consists in our intelligence, free will and immortality; must it not as well include a likeness to Him in the conditions of spiritual life, after that shall be reached? If God is timeless and spaceless, such must be the character of all spiritual life. The glorious anticipation of the Christian is that he shall be lifted after death into the fellowship of God. We confidently expect that we shall be like God. If in Heaven God is unconditioned while we continue conditioned by time and space, there will be such an essential separation between us and Him as would contradict the ideas and longings of our souls, built upon His own promises.

Immediately we are met by two objections. It will be said that to deny time and space as conditioning the souls of men in the spiritual life is to attribute to them infinity—that is, to make them equal to God. But this objection assumes that likeness to God in one respect involves equality with God in all respects. Though we claim that the spiritual existence of a human soul may be timeless and spaceless, there must be other special limitations which shall make it less than God. The other objection concerns the resurrection body of which revelation is made to us. It is claimed that the Bible doctrine involves some sort of material body for the soul hereafter. It certainly does imply a continuance in some way of what we are accustomed to consider our material bodies conditioned by time and space. But I wonder if it can be that the soul shall prove to be a resurrection body of the spirit: the "soul" as distinguished from the "spirit," the animal soul as different from the rational soul. Says Professor Shedd: "The ψυχή which is united with the πνευμα and constitutes one indivisible principle with it, is the inner reality of the body, the σῶμα; standing for, and representing it in the interval between death and the resurrection"("Theol.," II., 657). May not the ψυχή be the full resurrection body? If so, would not all objection be avoided?

So we claim the suggestion of indefinite continuance of the process of evolution as having such probability as to make it worthy of belief. But stoutly and emphatically would we dis-

claim that infinite continuance which would carry evolution as we know it here into the unseen realm beyond towards which our souls are resistlessly impelled. If the other life is timeless and spaceless for the soul, evidently it is so essentially different from our existence here that we have no right to apply to it the laws which control in this life. The suggestion we adopt for our confession of faith is an indefinite but not eternal continuance.

So we make a confession of faith—infinitely serious matter as it is. Understanding that belief is a matter of probability rather than of certainty; recognizing that what is possible at this time is statement rather than proof; premising that all that we have to say concerns theistic evolution—that is, the immanent God as working progressively through fixed laws, we believe in

I. The certainty that this principle has obtained in the sphere of animal life.

II. The probability that it has ruled throughout the sphere of matter.

III. The possibility of special accessions to the apparent force at work in the process of development.

IV. The presumption that the line of development has passed into the sphere of the human spirit.

V. The suggestion of indefinite continuance.

The difference between this and the old view of God's creative work seems to me like the difference between the view of the Infinite One which those Israelites had who stayed at the base of the mountain, and that vision of glory which he had who was called up to the summit of Sinai into the glory of God.

But after we have thought and guessed about all these things how little at best we know! Sir Isaac Newton, a little before his death, said, "I do not know what I may appear to the world; but to myself I seem to have been only like a boy playing on the seashore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, while the great ocean of truth lay all undiscovered before me."

Higher still can we go: "Beloved, now are we children of God, and it is not yet made manifest what we shall be. We know that, if He shall be manifested we shall be like Him for we shall see Him even as He is" (I. John iii., 2).

VIEWS AND REVIEWS.

EVOLUTION AND DEVELOPMENT.—In his "Five Points in an Evolutionary Confession of Faith," which we have the pleasure of furnishing in this number, Mr. Atterbury calls attention (p. 41) to the distinction "attempted" to be drawn by the Editor of CHRISTIAN THOUGHT between Evolution and Development. I heard him read his very interesting paper, and have since read it carefully, and am compelled to say that nothing therein contained, nothing seen elsewhere, has made me feel that the attempt to draw the distinction was not successful. On the contrary, the more recent utterances of some eminent thinkers have confirmed me in the conviction that it is important to the cause of truth that the distinction should be made and maintained. Nothing has more shown this necessity than the very paragraph in which Mr. Atterbury makes allusion to the distinction. He says that "Evolution and Development have been made practically synonymous by general usage." Where? In the writings of Darwin, Tyndall, Huxley, Clifford, Haeckel? He says that "the term Evolution has been so generally applied to Theistic Evolution that the attempted distinction at this time may perhaps lead to confusion." That is news. Have any of the distinguished writers above named, who are the authorized expounders of evolution, *ever*, even once, so used the term? On the contrary, do they not always so define and defend evolution as to show that in its very nature it excludes all idea of any sort of personality or influence acting on matter *ab extra*.

In place of our suggestion our friend suggests the use of three phrases, "Scientific Evolution," "Materialistic Evolution," and "Theistic Evolution." But are not the two latter *scientific?* Is there any evolution which does not stand on scientific ground? Is not "Materialistic Evolution" tautology? If it be evolution it must be materialistic, as the original propounders and authorized expounders of the hypothesis have maintained that there was nothing before matter, that matter has in itself, *quoad* mat-

ter, the potency as well as the promise of all existence (Tyndall) and that all things animate and inanimate have been produced by matter (Huxley), and that, consequently, mind is the product of matter (Haeckel). Is not "Theistic Evolution" as contradictory a phrase as "Theistic Atheism"? It sounds so to unadulterated evolutionists, and they resent it as unscientific. If you reply, as Mr. Atterbury does, that it is not contradictory, and then attempt to show it as he has done, they may rejoice that it is possible for a skilful logician and rhetorician to deliver a discourse on "Theistic Atheism." One line of thought might go to show that there is no personality outside of nature, and thus be atheistic, while it maintained that there is an infinite and eternal Energy (spelt with a capital E) in the universe which furnished all the theism which certain readings of science could give and all that was necessary to man. To religionists the lecturer might say, "I believe in a god, but not such a God as you believe in," just as our friend Mr. Atterbury *seems* to say to evolutionists, "I believe in evolution, but not such evolution as you believe in." And the lecturer might point to Mr. Herbert Spencer as a specimen of a theistic atheist at this very moment flowering out before our very eyes.

No; it seems to us best to let the evolutionists have their own word and to adhere to "development" wherever we wish to indicate a cosmical theory which has a personal God in it. That word suits all the requirements of the case and embraces all that trustworthy science ever claims. Then why not use a word about which there can be no contention? Why prefer the word that has to be continually explained and defended? I am sure that the writer of this note is an "evolutionist" up to the last limit of scientific discovery: but because he believes with Mr. Atterbury in the immanence of God in the universe, and does not accept the assumptions and presumptions and unproved hypotheses of materialism, he will not call himself by a questionable name. Mr. Atterbury himself well says (p. 43), "The doctrine of *development* involves, proves, emphasizes theism." And then goes on to prove it. Well, then, why not stick to "development" throughout? Then there would be no misleading. He also says (p. 49), "We believe that by orderly *development* the

immanent God has manifested His power, etc." Certainly. And the word "development" might have been used throughout this very bright and interesting paper, and it would gain the addition of perfect consistency, and the third point in the excellent writer's confession would not have stood as it now does in flat contradiction of evolution, when he speaks of "the possibility of certain accessions to the *apparent* force at work in the process of development." The word "evolution" could not take the place of "development" there, because *evolution* admits of nothing from without, no "accessions" or diminutions,—development does. Again, he well says (p. 54), "When the spirit of man was introduced, the apparent forces at work in the process of development were increased by what we may call spiritual force. For it seems impossible to make men in general believe that life came from matter." But this is flying into the face of the whole evolution theory. "The spirit of man introduced"? It never was "introduced" according to evolution—indeed, nothing has ever been introduced. Everything has always been in matter. It may be "impossible to make men *in general* believe that life came from matter," but you will never make a man a sound and thorough-going evolutionist until he can make up his mind to believe that life comes from matter. Then why use the word evolution which stands for one thing you do not mean, for "development" which stands for another thing which you do mean? You can never make an orthodox evolutionist believe that (p. 55) while "there has been an evolution of matter and of life, *it has stopped.*" Stopped indeed! It was never started. Who is there to stop it? It is inherent in matter as matter. *Development* may stop at the will of the *developer* who *develops*, but evolution ——!

And here attention is called to a simple philological fact. In the preceding sentence three words have been purposely used, and properly. They are in the language. Could any one without a smile of derision read the following sentence if he thought it was written seriously? "*Evolution* may stop at the will of the *evoluter* who *evolutes.*" To an evolutionist it would be most absurd. But will any one tell us why it happens that we have "development," "developer" and the active transitive verb

"develop" in our language, while we have "evolution" and neither "evoluter" or "evolute"? Plainly it lies in the fact that the hypothesis of evolution excludes *personality* and *intentional action.—Editor of* CHRISTIAN THOUGHT.

MONTHLY MEETINGS.

BY THE SECRETARY.

MAY.—The regular monthly meeting of the Institute was held at the rooms, No. 4 Winthrop Place, May 2d, at 8 P.M. In the absence of the President, Vice-President Henry M. MacCracken of the New York University, was in the chair. The devotional exercises were conducted by Prof. Phœbus W. Lyon of Summit, N. J. The minutes of the last meeting were read and approved. The names of new members were announced as follows:

Warner Moore, A.M., Ph.D., Memphis, Tenn.; Prof. George W. Miles, Jr., A.M., Emory and Henry College, Va.; John M. P. Otts, D.D., LL.D., Greensborough, Ala.; Hiram A. Wilson, A.M., Saratoga Springs, N. Y.; Lyman B. Sperry, A.M., M.D., Bellevue, Ohio; Joseph J. Bullock, D.D., Washington, D. C.; Thomas T. Eaton, A.M., D.D., LL.D., Louisville, Ky.; Rev. Gould J. Travis, M.A., Ph.D., Fallbrook, Cal.; A. H. Sigfried of the *Chicago Daily News*, Montclair, N. J.

The regular paper of the evening was by Richard Wheatley, D.D., of Cornwall, N. Y., whose subject was, "The Philosophical Basis of Religious Belief." Messrs. Joseph S. Taylor, S. N. Wilder and Phœbus W. Lyon took part in the discussion.

JUNE.—The Institute met in its rooms, Thursday, June 6th, at 8 P.M., the President being in the chair. The devotional exercises were led by Rev. Kenneth F. Junor, M.D., of New York. The minutes of the last meeting were approved. The regular paper of the evening was by Mr. James McGee of Plainfield, N. J., in whose absence on account of illness it was read by Mr. Walter M. McGee. His subject was "Trusts." The subject was discussed by Mr. Waightstill Avery Smith, Mr. P. Judson, Dr. Deems and Dr. Junor.

It was announced that the next monthly meeting would be held on the first Thursday evening in October.

ABOUT BOOKS.

[In this department we shall make mention of recent publications, especially those in the line of our studies. There will not be space for extended review. The name of the book, its publisher and its price when known, together with a brief statement of its drift, will probably meet the demands of our readers. Any book mentioned will be sent post-paid, on receipt of price, by WILBUR B. KETCHAM, Publisher and Bookseller, 13 Cooper Union, New York.]

We have received from Messrs. Ginn & Co. of Boston three text-books, which are printed and bound in the excellence of style which usually characterizes their publications. A few words touching each of these books will doubtless be of interest to many of our readers.

Wentworth and McLellan's "ALGEBRAIC ANALYSIS, PART I.," is intended to supply students of mathematics with a well filled storehouse of solved examples and unsolved exercises in the application of the fundamental theorems and processes of pure algebra, and to exhibit to them the highest and most important results of modern algebraic analysis. The work is to be issued in two volumes, the first of which closes an extensive collection of exercises in determinals.

"THE BRUTUS OF CICERO," edited by Professor Martin Kellogg of the University of California, is one of the text-books in the "College Series of Latin Authors," In the "Brutus," which was composed in 46 B.C., and purports to be a conversation with Atticus and Brutus, Cicero traces the development of oratory among the Romans down to his own time, with critical notices of about two hundred speakers. The long catalogue is relieved of dryness by the dialogue form, the freedom of digression, and by Cicero's fresh and suggestive style. Professor Kellogg has edited the work especially for early college reading. The introduction touches upon points of interest to those to whom Cicero is no stranger, and contains a full conspectus. The notes deal with the subject matter, historical relations, and diction of the dialogue rather than with the commonplaces of grammar.

Parallel passages are freely given, especially from Cicero's other rhetorical works and from Quintilian. The book is a substantial addition to our apparatus for the intelligent study of one of the most characteristic and valuable works in Latin literature.

Professor John F. Genung's "HANDBOOK OF RHETORICAL ANALYSIS," from the press of Ginn & Co., consists of studies in style and invention, and is designed to accompany the author's "Practical Elements of Rhetoric." It is an exceedingly interesting and valuable book. The work is in two parts: Part I.—Studies in Style. Part II.—Studies in Invention. In Part I. judicious selections from the writings of Bunyan, De Quincy, Burke, Thackeray, Ruskin, Lowell, Carlyle, Huxley, Newman, Hawthorne, Arnold and Macaulay are used as studies in rhetorical figures, fundamental processes, sentences and paragraphs. In Part II. equally fine selections from the works of Morley, Addison, Helps, Blackmore, Dean Stanley, J. R. Green, Hughes, Shorthouse, Scott, J. S. Mill, Ruskin, Tyndall, Macaulay and Curtis are used as studies in description and exposition. The literary extracts of this handbook are accompanied by notes, mostly in the form of questions, which bring out well what the specimens are meant to teach. And so Prof. Genung having provided his readers with theory, example, practice, completes the circle of his most excellent method of teaching writers how best to express their thoughts. It would be difficult to say too much in praise of the "Handbook of Rhetorical Analysis." We earnestly commend to both experienced and inexperienced writers the mastery of it and its companion volume.

"THE STRUGGLES AND TRIUMPH OF THE TRUTH" is the title of a handsome volume written by Rev. I. W. Lowber, Sc.D., Ph.D., Member of the American Institute of Christian Philosophy. It is, as the author says, the outcome of lectures and addresses on special occasions, but the first fifteen chapters make a kind of ecclesiastical history, showing how Christianity has triumphed over error in all the centuries. Then follow five sermons. One-third the volume is occupied by popular lectures with such titles as "Science and the Bible," "Geology and

Genesis," "The Real or Substantial in the Forces of Nature and in the Spiritual Life," "The Socratic Philosophy and Christianity." The last was published in CHRISTIAN THOUGHT. Dr. Lowber is a bright and honest thinker and therefore has given us matter much of which will raise objections, but all of which will prove interesting.

"OUR HYMNS AND THEIR AUTHORS" is the title of a volume from the pen of Prof. Tillett of Vanderbilt University. It is an annotated edition of the new hymn book just issued by the Methodist Episcopal Church, South. It was not difficult to make a great improvement upon the former hymn book of the Southern Methodist Church, which was exceedingly poor. Prof. Tillett has laid the whole Church of Christ under a debt of gratitude because of the fulness and accuracy of his notes on so many hymns which appear in every Christian collection of hymns. He has given original title, name and date of publication in which the hymn was first issued, what led to the writing of the hymn, passage of Scripture on which it was based, changes made in the original, omitted stanzas, together with incidents or illustrations which add interest to the singing of the hymn. It is a standard work and should be in the library of every Christian worker.

IN 1879 the Rev. Bishop Foster, of the Methodist Episcopal Church, published his volume entitled "Beyond the Grave," in which he maintained that "man is a spirit"; "not simply that there are these two parts to man, an organism of earth and an indwelling spirit, but that he [man] is spirit"; that at death "the body has finished its mission," and that "it will never rise again." Rev. James E. Lake, B.D., who was a pupil of Bishop Foster in the Drew Theological Seminary, has published a book entitled "BISHOP FOSTER'S HERESY," in which he maintains that these propositions are not only based upon false philosophy, but are also contrary to the teachings of the Bible, to the belief of the Church in all ages, and to the standards of the Church of which both he and Bishop Foster are members. It is a volume of 312 pages, written with marked ability in general and with great spirit. It will attract attention, especially in the denomination to which both gentlemen belong.

Rev. Dr. J. E. Rankin has written a poem in three parts entitled "BROKEN CADENCES." Part I. is issued by Our Day Publishing Co. Dr. Rankin is a genuine poet. Read the following extract and see:

To earth's kind countenance,
As to a mother's tender glance,
I turn me when my heart is sad;
One glimpse of her when I have had,
Again my soul is glad;
Me back has won,
When lustreless the sun,
And I had seemed heart-broken and undone.
The trees still clap their hands,
The brooks are laughing loud,
And speeding through the meadow-lands,
Their daisied banks they crowd:
While on their brink,
The giddy bobolink,
That has no time to stop and think,
Stoops down to drink,—
Nor tarries long;
Away he flies,
To greet the skies;
From water-beaded beak pours out his song:
Thus easing he his troubled breast,
In flight and song twice-blest;
Then, as if shot, drops to his nest;
Where his brown mate,
Mute with admiring love
For him above,
Presides in mother state.

ANNUAL LIST OF MEMBERS OF THE AMERICAN INSTITUTE OF CHRISTIAN PHILOSOPHY.

[CORRECTED TO JULY 1ST, 1889.]

☞ There are no Honorary Members.

VERY IMPORTANT.—As our publications are mailed free to all our members, it s important that we be promptly informed of changes of address to save trouble and expense.

Any errors in this list will be cheerfully corrected, with thanks to those who report them.

All names are retained on the books of the Institute until notification of discontinuance. The bills for membership dues are sent to each member annually. In the meantime our publications are forwarded, and members are expected to pay all arrears which may have accrued *up to date of discontinuance.*

ENDOWMENT MEMBERS.

[This list embraces the names of those who have contributed $100 or more to the Endowment Fund, placed in the order of the time of subscription. They are *Life Members.*]

DEEMS, CHARLES F., New York.
VANDERBILT, CORNELIUS, New York.
STOKES, ANSON PHELPS, New York.
DODGE, WILLIAM E., New York.
JAMES, D. WILLIS, New York.
JESUP, MORRIS K., New York.
FISK, CLINTON B., Seabright, N. J.
SCHIMMELL, O. O., New York.
SHEPARD, ELLIOTT F., New York.
VANDERBILT, GEORGE W., New York.
DIMMICK, Rev. FRANCIS M., Los Angeles, Cal.

LIFE MEMBERS.

[By payment of $50 or more to the General Fund.]

ARGYLL the Duke of, D.C.L.; Argyll Lodge, Campden, London, and Inverary Castle, Inverary, Scotland, $50.
BAKER, CHARLES J., Baltimore, Md., $50.
BALDWIN, STEPHEN L., D.D., New York, $50.
BATCHELOR, Mrs. EDWARD, Philadelphia, Pa., $100.
BIDEN, LEWIS, F.R.H.S., London, England, $50.
BOYNTON, FRANK H., M.D., New York, $50.
BRADFORD, AMORY H., D.D., Montclair, N. J., $100.
BRADLEY, JAMES A., New York, $500.
BROWN, W. HARMAN, New York, $100.
BUTLER, CHARLES, LL.D., New York, $50.
CRAWFORD, ROBERT L., New York, $50.
CROSBY, HOWARD, D.D., LL.D., New York, $100.
DANA, JAMES D., LL.D., Prof. Yale College, Ct., $50.

DEEMS, Rev. EDWARD M., A.M., New York, $50.
DEEMS, FRANK M., M.D., Ph.D., Orange, N. J., $50.
DEEMS, Prof. J. HARRY, F.S.Sc., Baltimore, Md., $50.
FAULKS, Rev. JAMES B., A.M., Haverstraw, N. Y., $50.
GETMAN, NORMAN, M.D., Richfield Springs, N. Y., $50.
GRANGER, Rev. ROBERT, Richfield Springs, N. Y., $100.
GRANT, RICHARD, Jersey City, N. J., $50.
HAMILTON, EDWARD J., D.D., S.T.D., Prof. Hamilton College, N. Y., $50.
HUNT, SANDFORD, D.D., New York, $50.
HURST, JOHN F., D.D., LL.D., Bishop, Washington, D. C., $100.
JEWETT, HUGH J., New York, $100.
LAKE, Rev. JAMES E., Bordentown, N. J., $50.
LATHAM, JOHN C., New York, $50.
LAWSON, ALBERT G., D.D., Boston, Mass.
LEE, Gen. G. W. CUSTIS, Pres. Washington and Lee Univ., Va., $50.
LEONARD, THOMAS, Leonardsville, N. J., $50.
LESLIE, Mrs. FRANK, New York, $50.
MCDOWELL, WM. O., New York, $100.
MCDOWELL, WM. T., New York, $100.
OSBORN, HENRY F., Sc.D., Prof. Princeton College, N. J., $50.
POTTER, Hon. O. B., A.M., New York, $100.
RANKIN, DAVID M., D.D., Fulton, N. Y., $100.
RASSAM, HORMUZD, Brighton, England, $50.
SCOTT, THOMAS J., D.D., Prin. Bareilly Theol. Seminary, India, $50.
SEELEY, Rev. FRANK H., Delhi, N. Y., $100.
SIMPSON, A. R., M.D., F.R.S.E., Prof. University of Edinburgh, Scotland, $50.
STOKES, G. G., D.C.L., LL.D., F.R.S., Pres. Royal Society, Pres. Victoria Institute, Prof. Cambridge University, England, $50.
STURGES, EDWARD, New York, $50.
TAYLOR, WILLIAM M., D.D., LL.D., New York, $50.
TURNER, ALBERT L., M.D., New York, $50.
VAN DEUSEN, EDWARD M., D.D., Carrollton, Md., $100.
WELCH, RANSOM BETHUNE, D.D., LL.D., Prof. Theol. Seminary, Auburn, N.Y. $50
WILSON, Mrs. AUGUSTA EVANS, Mobile, Ala., $50.
WOOLSEY, THEODORE D., D.D., LL.D., New Haven, Conn., $50.

MEMBERS.

ABBOTT, LYMAN, D.D., Brooklyn, N Y.
ADAMS, Rev. JOHN Q., San Francisco, Cal.
AINLEY, Rev. WM., Canning, Nova Scotia.
ALEXANDER, GEORGE, D.D., New York.
ALEXANDER, HENRY C., A.M., D.D., Prof. Hampden Sidney College, Va.
ALEXANDER, JOHN F., New York.
ALLAN, JAMES, New York.
ARMSTRONG, GEORGE D., D.D., LL.D., Norfolk, Va.
ARMSTRONG, Rev. JOHN Z., Ph.D., Nashua, N. H.
ARNOUX, Hon W. HENRY, New York.
ASPINWALL, Rev. J. A., Washington, D. C.

ATTERBURY, Rev. ANSON P., New York.
BALE, Rev. ALBERT G., Melrose, Mass.
BATTLE, ARCHIBALD J., D.D., LL.D., Pres. Mercer Univ., Ga.
BATTLE, Hon. KEMP P., LL.D., Pres. Univ. of N. C.
BAYARD, Hon. THOMAS F., Wilimgton, Del.
BEATTY, ORMOND, LL.D., Pres. Centre College, Ky.
BEDELL, Rt. Rev. GREGORY T., D.D., Bishop of Ohio, Gambier, O.
BELL, Hon. DAVID C., Minneapolis, Minn.
BELL, JAMES, Orange, N. J.
BENTLEY, ROBERT, D.D., Oakland, Cal.
BICKNELL, THOMAS W., A.M., LL.D., Boston, Mass.
BISHOP, Mrs. C. C., Morristown, N. J.
BISSELL, ALLEN P., Ph.D., D.D., Shelter Island, N. Y.
BLACKALL, C. R., M.D., Philadelphia, Pa.
BLANTON, L. H., D.D., Chancellor Central University, Ky.
BLAYNEY, J. McC., D.D., Frankfort, Ky.
BLODGET, BENJ. C., Mus. Doc., Prof. Smith Col., Mass.
BOLLES, ALBERT S., Ph.D., Prof. University of Pa.
BOLTON, HORACE W., D.D., Chicago, Ill.
BOLTON, Rev. VALENTINE F., A.M., Glen Gardner, N. J.
BOOTH, HENRY M., A.M., D.D., Englewood, N. J.
BORDEN, Rev. B. C., M.A., Sackville, N. B.
BOSE, RAM CHANDRA, M.A., Lucknow, India.
BOWEN, WILLIAM C., Pres. Female College, Bordentown. N. J.
BOWMAN, Prof. S. L., A.M., D.D., S.T.D., De Pauw Univ., Ind.
BOYD, JOHN G., A.M., M.D., B.C.L., New York.
BRACKETT, GILBERT R., D.D., Charleston, S. C.
BRANCH, THOMAS P., Augusta, Ga.
BRECKINRIDGE, Hon. WM. C. P., M.C., Lexington, Ky.
BROOKS, ARTHUR, D.D., New York.
BROWN, JAMES C., B.A., Bloomsburg, Pa.
BROWN, JAMES M., New York.
BUCKHAM, GEORGE, A.M., New York.
BULL, IRA B., Rahway, N. J.
BULLOCK, J. J., D.D., Washington, D. C.
BUNKER, Mrs. WILLIAM E., New York.
BURDGE, FRANKLIN, LL.B.. New York.
BURDICK, Rev. CHESTER F.. Jonesville, N. Y.
BURDICK, FRANCIS M., Prof. Hamilton College, N. Y.
BURGWYN, WILLIAM H. S., LL.B., A.M., M.D., Henderson, N. C.
BURRELL, D. H., Little Falls, N. Y.
BURRELL, DWIGHT R., A.M., M.D., Canandaigua, N. Y.
BURROUGHS, JOHN H., B.A., Philadelphia, Pa.
BUSHNELL, DANIEL E., Ph.B., D.D., Chattanooga, Tenn.
BUTTZ, HENRY A., D.D., Pres. Drew Theological Seminary, N. J.
CABELL, Rev. BENJ. F., Pres. Female College, Bowling Green, Ky.
CALDER, GEORGE, New York.

CALDWELL, LISLE B., D.D., Athens, Tenn.
CARPENTER, AARON, Philadelphia, Pa.
CARVELL, Rev. J. M., A.M., Ph.D., Harrisburg, Pa.
CATTELL, WM. C., D.D., LL.D., Ex-Pres. Lafayette College, Philadelphia, Pa.
CARNEY, Miss ALICE, New York.
CHAMBERS, GEO. S., D.D., Harrisburg, Pa.
CHAMBERS, Rev. JAMES, M.A., New York.
CHAMBERS, JOSEPH, Covington, Ky.
CHENEY, Rt. Rev. CHARLES E., LL.D., Chicago, Ill.
CLAPP, ALEXANDER H., D.D., New York.
CLARK, E. WARREN, A.M., D.D., Talahassee, Fla.
CLARK, Rev. FRANCIS E., A.M., Pres. Y. P. S. Chr. Endv. of U. S., Boston, Mass.
CLARK, J. O. A., D.D., LL.D. Macon, Ga.
CLARK, Rev. SAMUEL W., Paterson, N. J.
CLARK, Rev. WM. W., Brooklyn, N. Y.
CLOPTON, Hon. DAVID, Associate Justice Supreme Court, Montgomery, Ala.
CLYDE, Rev. JOHN C., A.M., D.D., Bloomsbury, N. J.
COCKE, Rev. ALONZO R., Waynesboro, Va.
COLBY, CHAS. L., Ph.B., Pres. Wis. Cen. R. R., Milwaukee, Wis.
COLEMAN, Rev. JOHN H., Troy, N. Y.
COLES, ABRAHAM, M.D., Ph.D., LL.D., Scotch Plains, N. J.
COLES, J. A., A.M., M.D., Scotch Plains, N. J.
CONRAD, FREDERICK W., D.D., Philadelphia, Pa.
CONRAD, L. T., A.B., Madison, N. J.
COOK, Rev. JOSEPH, Boston, Mass.
COOKE, Rev. HENRY E., M.A., Manchester, N. H.
COZBY, Rev. JAMES S., A.M., Newberry, S. C.
CRAMER, Prof. M. J., A.M., D.D., East Orange, N. J.
CRANE, Mrs. M. HELEN, Asbury Park, N. J.
CURTISS, GEO. L., A.M., M.D., D.D., Prof. De Pauw Univ., Ind.
CUTTING, ROBT. FULTON, M.A., New York.
DABNEY, ROBERT L., D.D., LL.D., Prof. University of Texas.
DARLING, HENRY, D.D., LL.D., Pres. Hamilton College, N. Y.
DAVIES, D. OWEN, A.M., D.D., Henderson, Ky.
DAVIES, Rev. EDWARD A., F.R.G.S., Stockport, England.
DAVIES, Rev. THOMAS E., A.M., Seymour, Ct.
DAVIS, CHARLES M., A.M., Bloomfield, N. J.
DAVIS, JOHN, M.D., Gomer, Ohio.
DAVIS, Hon. JOSEPH J., Chief Justice Supreme Court, Louisburg, N. C.
DAVIS, Miss SARAH F., Bloomfield, N. J.
DAVIS, NOAH K., LL.D., Prof. University of Va.
DAY, HENRY, New York.
DE HAVEN, ALEXANDER H., New York.
DEMOREST, W. JENNINGS, New York.
DE MOTTE, JOHN B., A.M., Ph.D., Prof. De Pauw Univ., Ind.
DENISON, JOHN H., Prof. Williams College, Mass.
DE PAUW, NEWLAND T., A.M., New Albany, Ind.

Dike, Rev. Samuel W., Auburndale, Mass.
Dix, Morgan, S.T.D., New York.
Dobbins, Rev. John Y., D.D., Trenton, N. J.
Dodge, Rev. D. Stuart, M.A., New York.
Dosker, Rev. Henry E., A.M., Holland, Mich.
Dows, Rev. Henry A., M.A., New Rochelle, N. Y.
Drinkhouse, Edward J., M.D., D.D., Baltimore, Md.
Driver, S. A., Augustine, Ala.
Drury, John B., D.D., Ed. *Christian Intelligencer*, New York.
Dryer, Rev. Geo. H., A.M., Medina, N. Y.
Duffield, John T., D.D., Prof. Princeton College, N. J.
Duncan, David R., A.M., Spartanburgh, S. C.
Dupré, Ovide, Esq., New York.
Dwight, John, New York.
Eaton, Thos. T., D.D., LL.D., Louisville, Ky.
Edgar, Rev. J., Ph.D., Pres. Wilson Col., Chambersburg, Pa.
Edwards, Rev. Francis M., Portsmouth, Va.
Egbert, Rev. John P., Buffalo, New York.
Elkins, Stephen B., A.M., New York.
Elliott, John, New York.
Elmendorf, David K., Brooklyn, N. Y.
Emerson, Ralph, Rockford, Ill.
Emery, Mark P., Portland, Me.
Eshbaugh, Daniel O., B.S., Montclair, N. J.
Everhart, Edgar, A.M., Ph.D., Prof. Univ. of Texas.
Fairbairn, Henry A., M.A., M.D., Brooklyn, N. Y.
Fairbairn, Robt. B., D.D., LL.D., Pres. St. Stephen's Col., Annandale, N. Y.
Fallows, Rt. Rev. Samuel, D.D., LL.D., Chicago, Ill.
Farrar, H. C., A.M., D.D., Albany, N. Y.
Faville, Rev. John, M.S., Appleton, Wis.
Fisher, Prof. James H., M.A., Rochester, N. Y.
Fletcher, James H., Esq., Newark, N. J.
Fleming, Rev. Thomas E., A.M., Ph.D., Davenport, Iowa.
Flinn, Rev. Prof. J. William, Columbia, S. C.
Forbes, Rev. Jesse F., M.A., New York.
Foster, Henry, M.D., Clifton Springs, N. Y.
Freshman, Rev. Jacob, New York.
Fries, Hon. Henry E., Salem, N. C.
Frisbie, E. S., D.D., Pres. Wells College, N. Y.
Fullerton, Geo. S., Prof. Univ. of Pennsylvania.
Funk, I. K., D.D., Editor *Homiletic Review*, Brooklyn, N. Y.
Gaines, Clement C., Pres. Eastman College, Poughkeepsie, N. Y.
Gates, Horace P., New York.
Gerhart, Eml. V., D.D., LL.D., Pres. Lancaster Theol. Seminary, Pa.
Gibson, Rev. Joel T., Augusta, Ga.
Gildersleve, Charles E., Sec. Soc. Prevention Crime, New York.
Goddard, Warren N., A.B., New York.

Goucher, John F., A.M., D.D., Baltimore, Md.
Green, Rev. F. M., Kent, O.
Greene, Miss Mary A., LL.B., Jamaica Plain, Mass.
Griffin, William, D.D., West Troy, N. Y.
Griffin, Mrs. William, West Troy, N. Y.
Groat, Rev. Wm. H., Rupert, Vt.
Groome, P. L., A.B., Greensboro, N. C.
Groves, Rev. H. D., Pres. Howard Female Col., Mo.
Hallock, Joseph A., Principal, Newark, N. J.
Hamilton, Rev. J. Benson, A.M., Brooklyn, N. Y.
Hamilton, S. M., D.D., New York.
Hamma, M. W., D.D., M.D., Baltimore, Md.
Hammond, Rev. John D., Pres. Central College, Mo.
Harper, William R., Ph.D., Prof. Yale College, Ct.
Harris, J. Andrews, D.D., Philadelphia, Pa.
Harris, Robert, New York.
Hays, George P., D.D., Kansas City, Mo.
Henderer, Mrs. E. C., Castleton, N. Y.
Hendrix, Eugene R., D.D., LL D., Bishop, Kansas City, Mo.
Hibbard, F. G., D.D., Clifton Springs, N. Y.
Hill, Thomas, D.D., LL.D., Ex-Pres. Harvard Univ., Portland, Me.
Hillman, Joseph, Troy, N. Y.
Himes, Chas. F., A.M., Ph.D., Prof. Dickinson Col., Pa.
Hine, Charles C., Newark, N. J.
Holden, Warren, A.M., Prof. Girard College, Pa.
Holden, Hon. Wm. W., Raleigh, N. C.
Hopkins, Isaac S., Ph.D., D.D., Pres. Georgia School of Technology.
Hoss, E. E., D.D., Prof. Vanderbilt Univ., Tenn.
Houghteling, James L., Ph.B., Chicago, Ill.
Hovey, Edmund O., M.A., Waterbury, Ct.
Hovey, Horace C., D.D., Bridgeport, Ct.
Hoyt, Thomas A., D.D., Philadelphia, Pa.
Hudson, Rev. Henry B., Brooklyn, N. Y.
Hughes, Rev. David C., A.M., New York.
Hungerford, Rev. Edward, M.A., New Haven, Ct.
Hulst, Rev. Geo. D., A.M., Brooklyn, N. Y.
Hunt, Mrs. Sara K., New York.
Huntington, Chester, A.M., Flushing, N. Y.
Huntington, Rev. DeWitt C., Rochester, N. Y.
Huntington, Rt. Rev. Frederic D., S.T.D., Syracuse, N. Y.
Huntington, George, M.A., Prof. Carleton College, Minn.
Huntley, E. D., D.D., LL.D., Annapolis, Md.
Hutt, Mrs. J. W., Slingerland, N. Y.
Hutton, Marcius H., D.D. (Pres. Genl. Synod R.C.A.), New Brunswick, N. J.
Inch, James R., LL.D., Pres. Wesleyan College, Sackville, New Brunswick.
Ingersoll, Andrew J., M.D., Corning, N. Y.
Irving, Mrs. Theodore, New York.

IVES, WILLIAM JAY, New York.
JACKSON, JAMES H., M.D., Dansville, N. Y.
JEWETT, Rev. E. H., S.T.D., Norwich, Conn.
JOHNSON, HENRY E., D.D., Greenville, Pa.
JOHNSON, Rev. Cyrus A., Batavia, N. Y.
JOHNSTON, FRANK L., St. Louis, Mo.
JOHNSTON, Col. WM., A. B., Charlotte, N. C.
JONES, AMOS B., D.D., LL.D., Pres. Huntsville Female College, Ala.
JONES, Hon. EDWIN S., Minneapolis, Minn.
JONES, H. K., M.D., LL.D., Prof. Illinois College.
JONES, RICHARD W., A.M., LL.D., Pres. Emory and Henry College, Va.
JONES, TURNER M., D.D., Pres. Greensboro' College, N. C.
JUNOR, Rev. KENNETH F., M.D., New York.
KEASBEY, Hon. A. Q., A.M., Newark, N. J.
KELLEY, DAVID C., M.D., D.D., Nashville, Tenn.
KELLEY, WM. V., D.D., Brooklyn, N. Y.
KELLOGG, CHARLES D., Sec. Charity Organization Soc., New York.
KENDIG, AMOS B., D.D., Brooklyn, N. Y.
KENNEDY, JOHN S., New York.
KEPHART, Bishop E. B., D.D., LL.D., Toledo, Iowa.
KETCHAM WILBUR B., New York.
KIEFFEN, J SPANGLER, D.D., Hagerstown, Md.
KING, Rev. GEO. W., Providence, R. I.
KITTREDGE, ABBOTT E., D.D., New York.
KITTREDGE, JOSIAH E., D.D., Geneseo, N. Y.
KNOX, GEORGE W., D.D., Tokio, Japan.
KNOX, Rev. WILLIAM W., A.M., Bayonne, N. J.
KROTEL, G. FREDERICK, D.D., LL.D., New York.
LADD, HENRY M., D.D., Cleveland, O.
LAFFERTY, JOHN J., M.A., D.L., Richmond, Va.
LAMBERTON, ROBERT A., LL.D., Pres. Lehigh University, Pa.
LANDIS, JOSIAH P., A.M., D.D., Prof. Union Bib. Sem., Ohio.
LANSING, JOHN G., Prof. Rutgers Theol. Seminary, N. J.
LEDWITH, Rev. WILLIAM L., A.M., Philadelphia, Pa.
LEWIS, Rev. DAVID N., Valley Falls, N. Y.
LITTLE, JOSEPH J., New York.
LITTLEJOHN, Rt. Rev. A. N., Bishop of Long Island, Brooklyn, N. Y.
LODGE, LEE DAVIS, A.M., Prof. Columbian Univ., Washington, D. C.
LONG, DANIEL A., D.D., LL.D., Pres. Antioch College, O.
LOOMIS, Rev. B. B., Ph.D., West Troy, N. Y.
LOWBER, Rev. JAMES W., Ph.D., Sc.D., LL.D., Fort Worth, Tex.
LOWRIE, SAMUEL T., D.D., Philadelphia, Pa.
LUDLOW, HENRY G., Troy, N. Y.
LUDLOW, Mrs. HENRY G., Troy, N. Y.
LYON, PHŒBUS W., Summit, N. J.
MACARTHUR, ROBERT S., A.M., D.D., Editor *Baptist Quarterly Review*, New York.

MacCracken, Prof. Henry M., D.D., Vice-Chancellor University of New York.
Mac El'Ray, Rev. Joseph H., M.D., Philadelphia, Pa.
MacIntosh, John S., D.D., LL.D., Philadelphia, Pa.
Mackay, Alexander B., D.D., Montreal, Canada.
Mackay-Smith, Rev. Alexander, D.D., Archdeacon Diocese of New York.
Macloskie, George, D.Sc., LL.D., Prof. Princeton College, N. J.
Magee, Irving, A.M., D.D., Rondout, N. Y.
Mangum, A. W., D.D., Prof. University of N. C.
Marsh, Rev. Elam, Fort Ann, N. Y.
Martin, Daniel S., A.M., Ph.D., Prof. Rutgers Female College, New York.
Maxwell, Hon. Augustus E., Tallahassee, Fla.
McBride, William A., New York.
McCormick, Cyrus H., Chicago, Ill.
McCullagh, Archibald, D.D., Brooklyn, N. Y.
McDowell, Mrs. A. M., Pluckemin, N. J.
McDowell, Charles E., Bloomfield, N. J.
McIntyre, John S., Ph.M., Davenport, Ia.
McLaurin, Rev. J. W., New Orleans, La.
Meneely, Clinton H., Troy, N. Y.
Merritt, Rev. Stephen, New York.
Miles, Geo. W., Jr., A.M., Prof. Emory and Henry College, Va.
Millard, Rev. Chas. W., A.M., New York.
Miller, F. Babcock, New York.
Miller. H. Thane, Pres. Mt. Auburn Inst., Cincinnati, O.
Minton, Maurice, New York.
Mitchell, Mrs. John, Norwich, Conn.
Monfort, Rev. F. C., Cincinnati, O.
Moody, Mrs. Mary B., M.D., New Haven, Conn.
Moore, Rev. Warner, A.M., Ph.D., Memphis, Tenn.
Morrow, James, D.D., Philadelphia, Pa.
Murray, R. D., M.D., U. S. Marine Hospital Service, Key West, Fla.
Myers, Miss A. M., Lakewood, N. J.
Neely, Thos. B., Ph.D., S.T.D., Philadelphia, Pa.
Newman, Rev. John W., D.D., Huntsville, Ala.
Nicholson, Rt. Rev. Wm. R., D.D., Philadelphia, Pa.
Norton, Ex., New York.
Oberholser, Jacob, Red Bank, N. J.
Orman, James A., M.D., D.D., Murfreesboro, Tenn.
Ormond, Alexander T., Ph.D., Prof. Princeton College, N. J.
Osborn, Amos O., Waterville, N. Y.
Osborne, John H., Auburn, N. Y.
Osmun, J. Allen, D.S., Newark, N. J.
Otts, John M. P., D.D., LL.D., Greensborough. Ala.
Owen, Richard, Prof., M.D., LL.D., New Harmony, Ind.
Pangborn, Major Z. K., Editor *Evening Journal*, Jersey City, N. J.
Parker, Wm. J., M.D., Nashville, Tenn.
Parsons, William H., New York.

PATERSON, Rev. R. A., A.M., New Rochelle, N. Y.
PATTERSON, W. J. BALLANTYNE, San Antonio, Texas.
PATTILLO, Rev. C. E., Cove Spring, Ga.
PATTON, FRANCIS L., D.D., LL.D., Pres. Princeton College, N. J.
PEARCE, Rev. E. H., Danville, Ky.
PECK, Rev. GEO. W., A.M., LL.D., Dansville, N. Y.
PETRIE, Capt. FRANCIS W. H., F.R.S.L., etc., Hon. Sec. Victoria Ins., London, England.
PIERSON, EDWARD F., Ramapo, N. Y.
PIKE, Rev. GRANVILLE R., A.M., Fargo, Dakota.
PLATT, WM. H., D.D., LL.D., Rochester, N. Y.
PORTER, E. PAYSON, New York.
PORTER, HENRY K., A.M., Pittsburgh, Pa.
PORTER, HUGH, New York.
PORTER, NOAH, D.D., LL.D., Ex-Pres. Yale College, Conn.
POTTER, Rt. Rev. HENRY C., D.D., Bishop of New York.
POYNTER, WILEY T., D.D., Shelbyville, Ky.
POWELL, THOMAS S., M.D., Prof. Southern Medical College, Ga.
POWELL, GEO. MAY, Philadelphia, Pa.
PRATT, Capt. RICHARD H., U. S. A., Indian Industrial School, Carlisle, Pa.
PRICE, Rev. DAVID V., Tazewell C. H., Va.
PRIME, WENDELL, D.D., Editor *New York Observer*, New York.
PUTNAM, HARRINGTON, New York.
RANDOLPH, T. E. F., New York.
RANKIN, J. E., D.D., Orange Valley, N. J.
REDDING, THOS. B., Ph.D., F.R.M.S., Newcastle, Ind.
REID, Rev. JOHN, Yonkers, N. Y.
RHINELANDER, CHARLES E., New York.
RHOADS, JAMES E., M.D., Pres. Bryn Mawr College, Pa.
RIGGS, Mrs. ELISHA, New York.
RIGGS, Rev. JAMES F., A.M., Bergen Point, N. J.
RIPLEY, ALLEN P., D.D., Buffalo, N. Y.
ROBERTS, WM. C., D.D., Pres. Lake Forest University, Ill., Moderator Genl. Assembly Presbyterian Church, U. S. A.
ROBINSON, Rev. J. H., A.M., Troy, N. Y.
ROOSA, D. B. ST. JOHN, M.D., New York.
ROSS, REUBEN, New York.
ROOT, Rev. FREDK. S., LL.B., Auburn, Me.
RUDDELL, JOHN, New York.
RUST, GEORGE H., Minneapolis, Minn.
RYLANCE, J. H., D.D., New York.
SABINE, WILLIAM T., A.M., D.D., New York.
SAWYER, JAMES E. C., D.D., Pittsfield, Mass.
SCHIEFFELIN, S. B., New York.
SCOTT, ANDREW, New York.
SEXTON, GEORGE, M.D., D.D., LL.D., F.R.G.S., etc., Dunkirk, N. Y.
SHEPARD, AUGUSTUS D., New York.

SHIVLER, Mrs. MARGARET A., Brooklyn, N. Y.
SHORTT, Rev. WILLIAM, Walkerton, Ontario, Canada.
SHOUDY, JOSEPH A., Brooklyn, N. Y.
SIGFRIED, A. H., Manager, *Chicago Daily News*, New York.
SIMS, JOHN C., Jr., Pres. Pennsylvania R. R. Co., Philadelphia, Pa.
SKIDMORE, LEMUEL, LL.B., New York.
SLEEPER, Hon. JACOB, Boston, Mass.
SMILEY, Hon. ALBERT K., A.M., Mohonk Lake, N. Y.
SMITH, Hon. A. HERR, Lancaster, Pa.
SMITH, AMOS B., M.D., Geneva, N. Y.
SMITH, ANDREW H., M.D., New York.
SMITH, Mrs. CATHERINE S., Albany, N. Y.
SMITH, FRANCIS H., Prof. University of Va.
SMITH, GOUVERNEUR M., M.D., New York.
SMITH, HENRY P., New York.
SMITH, JOSEPH J., M.A., D.D., Tomkins Cove, N. Y.
SMITH, SAMUEL G., A.M., Ph.D., St. Paul, Minn.
SMITH, WM. B., A.M., Ph.D., Prof. University of Mo.
SMOOT, R. K., D.D., LL.D., Austin, Texas.
SOUTHALL, JAMES C., Editor *Central Presbyterian*, Richmond, Va.
SPENCE, Mrs. J. P., Cincinnati, O.
SPERRY, LYMAN B., A.M., M.D., Bellevue, O.
STAFFORD, EZRA A., M.A., D.D., Toronto, Canada.
STEWART, THOMAS E., New York.
STICKNEY, Mrs. LEANDER, Albany, N. Y.
ST. JOHN, WILLIAM P., New York.
STOCKTON, CHARLES S., D.D.S., Newark, N. J.
STURTEVANT, Miss CECILE, New York.
SUMMERBELL, Rev. MARTYN, Pres. Chr. Cor. College, Lewiston, Me.
SUMRALL, Hon. JOSEPH K., A.M., Judge of Kentucky Court, Danville, Ky.
SUTHERLAND, DONALD G., A.M., Toronto, Canada.
TALBOTT, Rev. HENRY J., A.M., Indianapolis, Ind.
TALCOTT, JAMES, New York.
TAYLOR, ARCHIBALD A. E., D.D., LL.D., Ex-Pres. University of Wooster, O.
TERRY, Rev. RODERICK, D.D., New York.
THAW, WILLIAM, Pittsburgh, Pa.
THOMPSON, CHARLES L., D.D., New York.
THOMPSON, Rt. Rev. HUGH M., S.T.D., LL.D., Bishop of Miss.
THOMPSON, Mrs. WM. F., Mason City, Ill.
THWING, Rev. CHARLES F., Minneapolis, Minn.
TIGERT, JOHN J., M.A., D.D., Prof. Vanderbilt University, Tenn.
TILLETT, WILBUR F., D.D., Prof. Vanderbilt University, Tenn.
TODD, E., M.D., New York.
TRAVIS, Rev. G. J., M.A., Ph.D., Fallbrook, Cala.
TRAVER, Rev. ALLEN, Rochester, N. Y.
TREAT, E. B., New York.
TUCKER, WILLIAM, D.D., Mt. Gilead, O.

TUDOR, WILLIAM V., A.M., D.D., Norfolk, Va.
TUTTLE, Rev. D. HERNDON, Wilmington, N. C.
TYLER, Rev. BENJAMIN B , New York.
UCHIMURA, JON KANZŌ, Echigo, Japan.
VAN ANTWERP, Mrs. ELIZABETH, New York.
VAN BENSCHOTEN, JAMES C., LL.D., Prof. Wesleyan University, Ct.
VAN DYKE, HENRY, D.D., New York.
VAN DYKE, JOSEPH S., A.M., D.D., Cranbury, N. J.
VAN SLYKE, JOHN G., A.M., D.D., Kingston, N. Y.
VAN VLECK, JOSEPH, Montclair, N. J.
VERDERY, MARION J., New York.
VINCENT, JOHN H., D.D., LL.D., Bishop, Plainfield, N. J.
VIRGIN, SAMUEL H., D.D., New York.
VOORHIES, Mrs. MARY M., Brooklyn, N. Y.
WALKER, Rev. C. E., Twin Brooks, Dakota.
WALLACE, ADAM, D.D., Ocean Grove, N. J.
WARD, GEO. M., A.M., LL.B., Lowell, Mass.
WARNER, LUCIEN C., A.M., M.D., New York.
WARREN-BEY, EDWARD, M.D., C.M., LL.D., Paris, France.
WATERS, DAVID, D.D., LL.D., Newark, N. J.
WATKINS, WILBUR F., D.D., Philadelphia, Pa.
WENTWORTH, JOHN B., D.D., Buffalo, N. Y.
WESTBROOK, JOHN C., New York.
WESTWOOD, HENRY C., D.D., Fredonia, N. Y.
WHEATLEY, RICHARD, D.D., Cornwall, N. Y.
WHEELER, ALFRED, M.D., D.D., Greenville, Pa.
WHITNEY, GEORGE H., A.M., D.D., Pres. Cent. Col. Inst., Hackettstown, N. J.
WILLIAMS, HENRY S., Ph.D., Prof. Cornell Univ., N. Y.
WILLIAMS, JAMES M., A.M., Ph.D., Fall River, Mass.
WILLIAMS, Rev. JOHN E., Hornellsville, N. Y.
WILLIAMS, Rev. SHERMAN M., Albany, N. Y.
WILLIAMS, WILBUR G., D.D., Pres. Allegheny Col., Pa.
WILSON, HIRAM A., A.M., Saratoga Springs, N. Y.
WILSON, WM. D., D.D., LL.D., L.H.D., Prof. Cornell Univ., N. Y.
WINSLOW, Rev. WM. C., L.H.D., Ph.D., LL.D., Boston, Mass.
WITHERSPOON, THOMAS D., D.D., LL.D., Louisville, Ky.
WOOD, M. L., A.M., D.D., Rockingham, N. C.
WORRALL, JOHN M , A.M., D.D., New York.
WORTMAN, DENIS, D.D., Saugerties, N. Y.
YATES, EDWIN A., D.D., Durham, N. C.
YEISLEY, Rev. GEO. C., A.M., Hudson, N. Y.
YEREANCE, JAMES, New York.

IN MEMORIAM.

The Institute cherishes the memory of the following deceased members :

1882.—DR. WILLIAM H. ALLEN, President of Girard College ; GEN. JAMES LORIMER GRAHAM, New York ; REV. DR. MARSHALL B. SMITH, New Jersey.

1883.—Rev. Dr. Ferdinand C. Ewer, New York; Prof. Benjamin N. Martin, New York; Prof. Alexander Means, Georgia; Prof. Moses Stuart Phelps, Massachusetts.

1885.—Rev. Dr. Samuel Gilman Brown, Utica, New York; Rev. Dr. Charles Hawley, New York; Prof. Washington C. Kerr, North Carolina; The Rt. Hon., the Earl of Shaftesbury, England.

1886.—Rev. Dr. J. B. Cooper, Pennsylvania; Prof. James W. Dodd, Tennessee; Rev. Dr. John Forsyth, New York; Rev. Dr. Samuel K. Lothrop, Massachusetts; Prof. Julian M. Sturtevant, Illinois; Rt. Hon. and Most Rev. Archbishop Trench, Ireland; Dr. Sylvester Willard, New York.

1887.—Rev. Dr. Daniel Curry, New York; Rev. Samuel W. Duffield, New Jersey; Rev. William J. Gill, New Jersey; Rt. Rev. William M. Green, Mississippi; Rev. Dr. Roswell Dwight Hitchcock, New York; Rev. Dr. Mark Hopkins, Massachusetts; Col. Theodore Hyatt, Chester, Pa.; Prof. James L. Jewell, Illinois.

1888.—Rev. Dr. Isaac Errett, Editor *Christian Standard*, Cincinnati, O.; Rt. Rev. Samuel S. Harris, Mich.; Rev. Dr. Patrick Hues Mell, Chancellor University of Georgia; Rev. Dr. Alfred S. Patton, Editor *Baptist Weekly*, New York.

1889.—Mr. Samuel B. Chittenden, New York; Rev. Bishop Holland N. McTyeire, Tennessee; Rev. Dr. James P. Wilson, Newark, New Jersey.

OFFICERS OF THE INSTITUTE, 1888–1889.

CHARLES F. DEEMS, D.D., LL.D., President.

Vice-Presidents.

Connecticut, Noah Porter, D.D., LL.D.,
Delaware, Hon. Thomas F. Bayard,
Georgia, Patrick H. Mell, D.D., LL.D.,
Illinois, Rev. Bishop Charles E. Cheney, LL.D.,
Kentucky, Ormund Beatty, LL.D.,
Maine, Wm. DeWitt Hyde, D.D.,
Maryland, Edward J. Drinkhouse, M.D., D.D.,
Massachusetts, Mark Hopkins, D.D., LL.D.,
Michigan, Alexander Winchell, LL.D.,
Mississippi, Rt. Rev. Wm. M. Green, D.D., LL.D.
Missouri, Rev. Bishop Eugene R. Hendrix, D.D.,
New Brunswick (Canada), James R. Inch, LL.D.,
New Jersey, Francis L. Patton, D.D.,
New York, Ransom B. Welch, D.D., LL.D.,
North Carolina, Hon. Kemp P. Battle, LL.D.,
Nova Scotia (Canada), Rev. William Ainley,
Ohio, Rt. Rev. Gregory T. Bedell, D.D.,
Pennsylvania, William C. Cattell, D.D., LL.D.,
South Carolina, Gilbert R. Brackett, D.D.,
Tennessee, Rev. Bishop H. N. McTyeire, D.D.,
Vermont, Rev. Samuel W. Dike, A.B.,
Virginia, Gen. G. W. Custis Lee,
Wisconsin, John Bascom, D.D., LL.D.

Executive Committee.

A. H. Bradford, D.D.,
Mr. Wm. Harman Brown,
S. M. Hamilton, D.D.,
Howard Henderson, D.D.,
H. M. MacCracken, D.D.,
Rev. A. Mackay-Smith,
Mr. T. E. F. Randolph,
Rev. Henry M. Sanders,
Rev. S. H. Virgin,
Mr. James Yereance.

Trustees.

Mr. Cornelius Vanderbilt,
Mr. William O. McDowell,
Gen. Clinton B. Fisk,
Mr. Owen O. Schimmel,
Mr. John H. Osborne.

Mr. Charles M. Davis, *Secretary*,
4 Winthrop Place, New York.

Mr. Wm. Harman Brown, *Treasurer*,
64 Broadway, New York.

CHRISTIAN THOUGHT.

THE NECESSITY OF FAITH.

[A sermon delivered before the American Institute of Christian Philosophy, July 21, 1889.]

BY ALEXANDER MACKAY-SMITH, S.T.D.,

Archdeacon of the Diocese of New York.

For we walk by faith, not by sight.—II. COR. v., 7.

WHEN we realize who the man was that made this confession, it is certainly a very remarkable one. In point of fact I suppose that no Christian, save the Twelve Apostles, ever had as much reason as St. Paul to reverse the wording of the text, and to say, "We walk by sight, not by faith." He had been converted by a light and voice from Heaven. He had seen visions, and worked miracles in the name of Christ, such as are confessedly within the power of no Christian since. And yet he tells us, in effect, that to hold the Christian hope, and to walk the gospel path, and to believe the promises of Christ, still demanded so large a share of pure faith in him as to dwarf all earthly evidence. It is a confession of human feeling in Paul that brings him very near to us. For he certainly believed that he had the power to work miracles, and had been converted by one, as already said. And yet there was so much in the world that seemed to contradict the Gospel, that all his sight was as nothing compared with the faith required. Do you not think that a man who could speak thus, understood the difficulties of religion just as keenly as you do? He saw in how many ways God hides Himself from men; how little He often seems to interfere with evil; and how humble, obscure, incredible were the surroundings and evidences of that Saviour, who declared Himself to be, nevertheless, God's

Son. Yet St. Paul was in the face of this such a fervent Christian that he willingly gave his life and all that he had for his Master—than which no greater proof of sincere conviction can be expected. But in so doing he declared that he followed not his lower, but his higher nature, "We walk by faith, not by sight."

I ask you to mark this well. For no doubt some of you entirely misapprehend what it is that Christ asks of you through His Church. You look back to the gospel times and you think, "Those magnificent Christian heroes believed because they thought the evidence from what they saw was so overwhelming. They were convinced that miracles were being enacted all about them. Many of them saw their Master risen from the grave. So they walked by sight, not by faith. But to-day I have no such sight given me. And from all the myriad books and papers issuing from the Christian press, I get no convincing, mathematical, scientific proof as to the absolute certainty of these things. Therefore I am not to blame in caring little for them. When I can have the same proofs by sight that St. Paul had, or when I am convinced in the same way, *e.g.*, as that twice 5 = 10, then I shall become a true Christian—until then I wait for the Church to be more successful in the proofs she labors at so vainly. Any other faith is really weakness."

Now such reasoning is a misapprehension. Miracles were needful once to introduce and accredit the Gospel to the world. They soon ceased. It is well they did. For they have been, however admirable once, a fruitful source of error ever since. For it is a mistake to suppose that Christianity has ever tried to make the Gospel so clear that there will be no lower doubt in men's minds. That can never be done. The Gospel is moral and spiritual truth. You never can prove a moral or spiritual thing mathematically. This would be to confuse two different ideas. Nay, I go so far as to say that it would not be desirable to have the Gospel so proved that like the ocean we could not help confessing it. In other words faith or trust is a *necessary* part of religion. God meant it to be so. And when men say that one must wait until the Gospel is proved, meaning thereby until they are compelled to feel its truths as they feel hunger, and know its certainty as they know

last year's events, they would really take from religion all its trust—that is, all its deepest and most useful attribute. How deep and how useful, we can only appreciate when we see that even St. Paul had to be educated by faith. Surely from him, if from any human being, God might have taken the necessity of faith, and given clear sight—shown him the reason of all things, and stamped the visible proofs across them, like the sun in heaven. But He did not. St. Paul would have been less than he became, had God done so. He became the noblest man among men, simply because God withheld from him so much knowledge, as He does from us: simply again, because in so many questions of life the Apostle was compelled to say, as we are, "I do not know, but I can trust."

Now if you have taken the pains to follow me, you will be interested to dwell upon some of the beautiful truths connected with faith. Let us see how strong they are. Look, to begin with, at that wonderful Gospel of Love, left us by Jesus. What is it? What does it mean? Surely this, that God loves men, and wants to raise them into a life where they will love Him, desire holiness, trample evil under foot, win Heaven because the virtues and the heavenly graces have become to them supremely dear. That is the Gospel idea. Not to make men happy here primarily—but good, genuinely. But do men believe this? No—not by nature. If not totally corrupt, they are still far removed from God. They do not love Him, or desire to obey Him. They do not believe that He loves them. They are proud, arrogant, desiring their own way. They do not take naturally to any self-sacrifice, or discipline, or virtues that cost much effort, unless they have some low, personal motive in view. They believe in it for other people, but not for themselves. We know well enough that this is no exaggeration. This is the state of mind of most men to whom the Gospel is offered. Now consider. There are just two ways apparently in which such a message of love as God has sent us in the Gospel could assert itself more strongly and exact a more implicit and general assent among these sinful and reluctant men than now it does. It might, in the first place, be accompanied with constant miracles still. The liar might be struck dead, the worldly man be cursed in his business, around

the Bible might play a radiant light, the right thing might always prosper. In other words God might give us every day such proofs (as unbelievers are always saying He should do) that not to believe would be impossible, and not to do right would be madness. Now look at this. It seems very plausible on the surface. We often wish it. But were matters so arranged, as people are always asking, and were there no room for faith left, man would become a distinctly lower animal. He would lose entirely his independence. All freedom of choice would be taken away from him. To do right, to obey, to believe, would at once become commercially profitable. But in so doing it would also at once appeal to all our lowest and basest instincts. The whole noble and divine idea of goodness would disappear, for there would be no chance to cultivate it. For if there is one truth that all men agree in, it is that the more unselfish a motive is the higher becomes the action from it, and the sublimer the effect on the character of the actor. And, once more, we know that no character ever improves if it does right from a poor or ignoble motive. If, therefore, God should govern the world to-day openly by force, if the good were rewarded always by prosperity, if our Christian doctrines were continually confirmed by miracles, it would not change men's *natures* for the better. And that is the important point, *to ennoble our natures.* The only object in religion is how to make godlike character. There would be no room in such a case for that growth which comes from our wills choosing the right when we are free to choose the wrong. To be compelled to believe and to do right might make a quieter world, but not a more righteous one. It would multiply the hypocrites, but not the saints. We should obey, but it would be from fear, not from love. Love would see no opening. Terror, superstition, abject slavishness would abound, but nothing else would have a chance to grow strong. The very noblest natures would lose their nobility, for there would no longer be a chance to exercise it. The lower motive of selfishness would be so continually stepping in, that the higher motive would die from lack of vitality.

Take a common illustration to show this, out of every-day life. With every Sunday comes to you the duty of attending

public worship. But you are free not to do so. Your morning paper says, "Stay at home, and I will amuse you." Your easy-chair pleads, "Stay at home, and I will rest you." Your unchristian friend adds, "Stay at home, and I will lounge with you." The cloudy sky suggests, "Stay at home, and I will not wet you." Conscience alone protests, "Go." Now if you let conscience conquer, if you resist your lower nature, and discipline yourself, and go from the free call of duty, are you not a distinctly better man for the victory? You were not obliged to go. Conscience and inclination fought a bitter fight, and conscience won. You have gone a step upward. There is not a virtue in you that has not a better chance of blossoming, because you have done a duty to-day. It is countless instances of this kind, victories over a thousand different temptations, that temper and glorify the soul, and take it nearer to God, and create the love of right, which is the love of God, and will some day mean Heaven. But now suppose that in order to prove the Gospel of Christ true, it was announced and believed that those who did not go to Church to hear it should very soon lose health and fortune. The churches in New York would soon surpass the saloons, and be seen on every corner, crowded and besieged by multitudes. You would be in your place twice a day at least. You would fling your paper or your nap to the winds. You would brave a hurricane, or an earthquake. And men would experience the curious sensation of being as eager to get to church on Sunday as they are to get to business on Monday. But how about your character? How about those qualities of free trust and love, self-restraint and goodness, which alone can fit the soul for what Jesus Christ declared to be the whole end of living, viz., final life in God? Would these flourish in such an atmosphere? You know that they would not. The world would soon lose all idea of them. For they would stand no chance. There would be a mad rush for safety alone. Real virtue would drop from humanity like a withered limb, unexercised for years. Life would be confined in a strait-jacket. For to be real, goodness must be free to make its choice. And no religion too absolutely proved to the eye could give such freedom to the will.

Indeed we easily see how this demand for convincing mathe-

matical proof results in the world about us. The Neapolitan lazzaroni believe as absolutely in the genuine miraculous liquifying of the blood of St. Januarius, as you do in your own existence. But has it ever made the moral and spiritual laws of the God to whom it testifies, dearer to them? Has this walking by sight in any way made them fitter for a heavenly life? And if not, why has it not even shown a tendency to do this? Ponder that. Why not? Again, thousands in France have had a touching faith in the miracle of Lourdes. But have we even heard that it opened those springs of spiritual and moral life which it is the main object of Jesus to move? No—they want to be healed, not to be better. Have the so-called spiritualist voices, on whose genuineness many would stake their lives, helped to create in them that strong, righteous, victorious soul, battling with temptation, which images God among fallen men? No, it has made men insanely curious—that is all. For neither terror nor fear, but free faith is the only healthy atmosphere in which great spiritual virtues grow.

But I have said, you will remember, that there was another alternative left us, if we are determined to get rid of faith and walk entirely by sight. On one hand continuous miracles—on the other none at all. We can abolish the need of faith by ceasing to believe in anything about God which requires any strong faith. The story of Jesus, His miracles, His promises, His claims to be our God and Saviour, the mystery of the heavenly life, His resurrection—all these men can give up, as some have done, and believe only in a far-off God and in a natural religion. So we should need no faith of any strong kind. But the result to the world and to human nature is just as evil as in the case of too much superstition.

It is not only that in losing intelligent and loving faith, a most noble and engaging element in human character disappears—it is not only that men without faith get generally to look on themselves as little gods, full of self-conceit and presumption. No—strong as these reasons are why God should give us a Gospel which requires faith in His Son—there is another stronger. It is that trust in the promises of Christ, union with Christ, by faith in His atoning work, devotion to Him through

the love awakened by enthusiasm for His goodness,—that these are the very sources of the peculiar strength of Christianity. Without them its power to raise men would be largely gone. If the necessity for these were removed by God from the human heart, the necessity for our religion as God's revelation would depart also. It would lose that great distinctive point which now lifts it heaven-high above human knowledge, viz., the divine power which it possesses to make men better.

You hear some men saying to-day, "If the Christian Church would only give up her mysteries, how much good she might do. If she would only allow that Christ was but a good man, teaching a grand philosophy, if she would only give up Gospel miracles and other things which make me hesitate to believe, how many men would enter her gates who now stand without." Ah, if Christianity gave up these things, and attempted to explain away her mysteries, it would be time to give up Christianity. For her divine right would be gone. It would do men little good then to enter her gates. She would sink at once to the level of a mere amiable philosophy. And the truths she teaches would have just the same power as philosophy to help men follow right—that is to say, very little at all. It is not knowledge of goodness that we lack—it is power to follow it. It is not philosophies that we need, but a religion. Any infidel will echo the Gospel so far as to tell you that "it is well to be virtuous," that "the wise man will control his passions," that "integrity is noble." Merely to say these things, and to give us no aid or motive-power to obey them, is as useless as to write them in a copy-book. Yet it is to just such a system as this (I speak in all Christian courtesy) that Unitarians and Radicals and so-called Free-Thinkers, would reduce the Gospel of Christ. They say to us, "Prove the mysteries of Christianity, or else give them up. Either make them plain to us and we will believe, or else abandon them, and talk of Christ as we talk of Socrates, or any other good master." And we answer sadly, "We cannot do either of those things. To ask to prove a mystery is absurd. The very central power and truth of our religion is the mystery that God gave it, and became man for our sake, that He might lift us by faith in Him. This faith is its power. These mysteries

and miracles that you object to, these dark things you would have made plain, are what we should expect in a revelation if it is from God. To sweep them all away, would be to destroy the proofs that the Gospel was a revelation. And ponder this—if it be not a revelation from God its power is gone. The Christian world sinks back then to its old heathen level. So far from helping men to live better, this loss of faith in Christ as the Son of God takes away all their power. It is no help to me in my temptations to know that Socrates or any other sage, even Christ, if only a man, once lived well. But it is the very greatest help, if I am in earnest, to believe that 'God so loved the world that He gave His only begotten Son, that all that believe in Him should not perish, but have everlasting life,' to believe that He is watching me now, and that just in proportion as I conquer my sins in His name, and live in His faith, I shall be moulding my character for eternal happiness in the world to come. This is my one escape from the power of sin."

We see then what is meant by the necessity of faith, and why even St. Paul must say in the text, "We walk by faith, not by sight." God, we see, could have given us sight, *i.e.*, a Gospel which should be so impressed upon men by constant miracles to-day, that none would have to doubt or to disobey. But God's plan is not merely to make men obedient as a machine is obedient, or to influence them by motives of selfishness and terror, to such an extent as to destroy the higher motives of lofty principle, love of duty, reverence and devotion, which alone ennoble us. Or, again, we see God might have given us sight by taking away all mystery, all faith, all tokens of divinity from Christ and His Gospel, and sending us only such a scheme of morality as any philosopher or professor could write out. And as the result of this, spiritual life and strength would largely disappear, as they have done in China, for the Chinese hold almost precisely the same opinion about religion which modern infidelity commends to us. The icy-hardness and indifference of the Chinese character is the absolute and logical result, as is their social system, of those principles which many worthy and well-meaning men are preaching among us to-day.

My dear Christian friends, let me ask you to ponder this sub-

ject, if you would confirm your deepest convictions about the Gospel you are baptized into. Such a faith as is ours—what a glorious thing it is! God, we have seen, might have turned it into abject fear—or He might have hidden Himself from us altogether. In the one case we should have had only belief without freedom—in the other only freedom without belief. Do you not see then how divine and wonderful a problem it is which the Gospel of Jesus is called upon to solve? It tries to give us such a firm ground for our faith that faith shall not be mere credulity,—yet not too firm ground, lest all our basest passions leap up to meet it, and so smother the lofty principles which it is the main end of religion to strengthen through faith. The effort of our Saviour was to give us sufficient promises to encourage us, but not to awaken our avarice—to show us a reason why we should follow Him, and yet not to compel us—to awaken our hope, and aspiration, and effort, and still not to arouse the selfish cunning of human nature, but to purify our hearts by a far-off and dimly-seen prize. And the result of this is the Gospel. It disappoints many men. They want something they can grasp with less trouble. They do not like, as a great preacher says, "to have their heart dealt with at all in the way of trial and discipline, they want to be spared the effort of being called on to love and trust in the midst of danger and difficulty." Either give us sight, or else do not trouble us at all, they cry. And it does seem at times as if God concealed Himself beyond the power of human patience to endure. But remember, at such times, that should God show Himself more clearly, no one of us could assert that the result would tend to real righteousness, real faith, free and healthy growth of such a type as brings men nearer to the God of holiness and love. For that to be genuine, men must have liberty of choice. That is the law of life—why, we cannot say. I do not really know why a plant must have light to be healthy—but so it is. We cannot say why a righteousness that is genuine must have liberty to be unrighteous if it chooses—but we are so made that any other conception is impossible. And in that we have the explanation why a religion to be genuine must be such as to leave the human will practically free to believe it or to disbelieve.

I close then by repeating the text, in the full meaning given by these thoughts, "We walk by faith, not by sight." "Without faith it is impossible to please God," says Holy Scripture again. You who are not Christians, will you not think of this? The Gospel appeals only to your higher side. It does offer you both warnings and promises, but they are designedly placed afar-off, so as not to compel, but to persuade and encourage. Do you not see, then, the glory, the beauty, nay, the necessity of faith? Your very freedom is your condemnation, if you refuse to believe. "For, only the love of Christ constraineth you." And God's invitation to trust Him should be to you irresistible, because He will not take a forced obedience, nor accept any fruit of the soul that has not ripened on the branches of a faith that freely turns to Him.

WOMAN'S WORK IN THE MODERN CHURCH.

[Delivered before the American Institute of Christian Philosophy.]

By Jane M. Bancroft, Ph.D., New York.

In all ages of the Church, the influence of woman has been a potent factor in its development. Her voice has not been heard in Church councils, neither to her have belonged the dignities and honors that pertain to eminence of station; but she has shared largely in the burdens and responsibilities that rest upon the rank and file of the Church. She maintains this position at the present hour.

Take all of the Church communities, orthodox or unorthodox, Catholic or Protestant, rationalist or evangelical—are there any, the majority of whose members are not women?

Two-thirds of the great Presbyterian denomination are women; as large a proportion of the still larger Methodist denomination, while the adherents of the Catholic faith are in an overwhelming majority women. Upon the Continent of Europe, how could the Catholic Church maintain its high supremacy in the countries of the Latin race, were it not for the devoted attachment of the women of the Church? Every Saturday, as you pass along the streets of Paris, you may notice long processions of boys, going at the hour appointed to the parish church to obtain instruction in the catechism, and equally as long processions of girls in the hours appointed to them.

What does this mean? Just this. That a multitude of devoted mothers have prepared these children and sent them forth to receive what they believe to be instruction in the knowledge of divine things, and while there are such a multitude of devoted Catholic mothers, and such training is given to the vast majority of the children of France, Catholicism is not to lose its hold upon the people of the Republic as is popularly believed, but is keeping it intact and transmitting it to future generations. Why is

it that the missionaries of our Protestant denominations find Italy such sterile soil? For a like reason. The mothers of Italy are Catholic, and they bring up their children to share their faith. The boys grow up and go forth into the world where the reaction from the too exacting demands of their childhood's belief drives them into the arms of rationalism, but the girls remain at home to become in turn what their mothers are, the main bulwark of the Catholic religion, and to continue the same state of affairs. This is one form of woman's work in the Church so unnoticed, yet so pervasive, so insignificant, yet so potent, that some one generalizing from it has said "Give me the mothers of a country and I will determine the religious faith of the country."

Among the women of the Germanic races, woman's work in behalf of the Church has expanded into large proportions during the present century. Women have learned the power of organization and have applied it in many directions. Within the last twenty-five years in England, Scotland and America, great missionary societies for home and foreign work have originated, officered and directed by women, that have expended hundreds of thousands of dollars, and sent forth thousands of workers for God to heathen countries. The Church is benefiting by the increased facilities for higher education among women, the widened opportunities that are widening their lives, and the disciplined faculties that enable them to combine together to carry forward great enterprises. Just how far this onward movement is to extend and what part Christian women are to take in the interests of the future none can foresee.

The Revised Version tells us "the women that publish the tidings are a great host," and what commentary the future is to give us to that verse, no mortal voice can at present foretell. But I design to limit our consideration to one phase of woman's work in the modern Church, which lies quite apart from any of the forms of woman's activities that are so familiar to us. Apart, and yet again near, because all alike relate to woman's helpful service, and her interpretation of God's truth by god-like deeds. Yet this form of service has about it an old-time atmosphere that is in quaint contrast to the exceeding modernism of the age in which we live. In truth it reaches back to the days of St. Paul,

and curiously links the modern Church with that of apostolic times. When St. Paul said in Romans xvi., 1, "I commend unto you Phebe, a deacon of the church at Cenchrea," he had in mind an individual filling an office precisely similar to that occupied by the deaconess in the modern Church. The best German authorities are agreed on this point. Schäfer in "Die Weibliche Diakonie," Wacker in "Der Diakonessenberuf," as well as Fliedner himself, maintain that the office of deaconess, as it is exercised in the Protestant Church of Germany at the present time, is essentially the same as the office known to the authorities of the early Church.

It was in the fourth and fifth centuries that the female diaconate attained its highest importance. It developed especially in the Eastern Church, for the customs of the country favored the seclusion of women members, and made it important that certain duties connected with baptism, the visiting of the sick, and the religious instruction of women be performed by women members who were deaconesses. As a consequence, the diaconate of women was known much longer in the Eastern than in the Latin Church, and traces of it were still found in the twelfth century, showing that it was a factor to be counted on for nearly two-thirds of the Christian era. As a distinct office it vanished during the middle ages, together with other important features of primitive Christianity. Yet it is a singular fact that occasionally the mists of oblivion are dispelled, and we catch glimpses of the office. This is especially true at any period of religious awakening. So we find some traces of a renewal of the ancient order among the Waldenses in the twelfth century; the churches of the Netherlands shortly after the great Reformation, and among the Puritans of the sixteenth century. These attempts at the revival of the office, sporadic as they were, show that the conception of it still remained as a good to be realized. At the beginning of this century many thoughtful people were impressed with the importance of restoring to the Protestant Church this arm of service of which it had been so long deprived. The cloistered nuns had replaced the apostolic deaconesses in the Catholic Church, but since the famous labors of the great Bishop Vincent de Paul that gave rise to the Sisters of Charity

in the seventeenth century, the Catholic Church had enjoyed many of the excellent features of the work of the deaconesses in caring for the needs of childhood and the infirmities of old age. Von Stein, the famous German minister of the early years of the century, had echoed the complaint of Southey in England, "Why cannot Protestantism have its Sisters of Charity?" The answer was given by a humble pastor of an obscure village church at the little village of Kaiserswerth on the Rhine. The pastor was Theodore Fliedner, whose heart was early stirred to sympathy with the poor, the weak and the erring. It was through his efforts that the first Prison Society was started in Germany. In his attempts to reform and aid discharged women prisoners, he was led to an intelligent conception and clear conviction of the value of the services of Christian women. He determined to form a society of deaconesses. A physician's daughter gave herself as the first candidate, and a house was opened for the instruction and aid of the sick and friendless poor. The first patient was a Roman Catholic servant-girl. Such was the beginning of the deaconess movement of the nineteenth century. This was in 1836. Just 53 years ago. To-day a visit to Kaiserswerth would be a revelation of the growth of the movement. Instead of the hired house which gave shelter to the deaconesses in the early days of the humble beginning, there is a fine building of vast proportions, the Mother-House of Kaiserswerth, to which over 700 deaconesses scattered throughout the nations of the world look as to a veritable home. Connected with this is a building called the "Feierabend Haus" or "Home of Evening Rest," which is a home for those who have become infirm or aged in their self-denying toil.

There are various schools in which the deaconesses are given practice in teaching; an infant school or kindergarten, where, together with other instruction, great pains are taken that the stories of the Bible should be told so as to make them clear and interesting to the youngest child. There is, too, a normal school where deaconesses are prepared for all grades of teaching; an orphan asylum is maintained where children of the educated middle class whose fathers were pastors or professors are received; while an insane asylum built with every regard to mod-

ern scientific equipments crowns an eminence just outside the village. Here only Protestant women are received, as singularly enough there are no questions that insane patients more violently wrangle over than differences of religious faith, but the deaconesses go forth to nurse equally patients of either sect.

At the hospital over 700 patients were received and cared for last year. The refuge for discharged female convicts which was the starting point of the movement, still continues its good work. Over 900 women have been sheltered here, and been given an opportunity to turn to lives of virtue and goodness, and afforded every aid that true friends could give them. A publishing house is also connected with the institution, which issues religious books and tracts. The institution had only existed a year and a half, when some deaconesses were asked to take charge of a hospital in a neighboring town. That was the beginning of work in outside stations, so that now in Germany alone Kaiserswerth deaconesses are at work in 28 different stations. But the most notable extension of the work is at Jerusalem and large cities of the East. The hospital at Jerusalem had 500 patients last year, and over 7,000 outside patients were treated. There are also hospitals in Cairo, Alexandria, Beirut and Constantinople. In addition there is a girls' orphanage at Jerusalem, another at Beirut, and prosperous girls' schools exist at Smyrna, Bucharest and Florence in Italy. The homes of this eastern land are constantly being reached through the influences of these schools, and they already have had a perceptible effect upon the cause of woman's education in the East.

But what is tangible and apparent in the Kaiserswerth field of work is the least of its results. Its example has stirred the heart of Protestant Germany. Like institutions have multiplied all over the continent and have marvellously prospered.

Deaconess institutions now exist in Switzerland, France, Holland, Denmark, Norway, Sweden, Russia, Austria, England and Germany, while the countries in which these homes have stations are literally too numerous to mention. Spain, Italy, Greece, Turkey, the countries of Northern Africa and of Asia Minor, as well as isolated mission stations throughout the entire world are now served by deaconesses. The institutions that are similar to

Kaiserswerth unite with it in a general conference held once in three years at the little German village where the movement first began. At the conference of September, 1888, nearly sixty Mother-Houses were represented, and 7,129 sisters were working in 2,263 different fields of labor distributed over nearly all countries of the world.

The deaconess performs her duties without fee or reward. This is a main feature of the system. She is not free even to accept personal presents, for in that case unworthy motives might creep in. The deaconess at Kaiserswerth receives from the institution her modest wardrobe, consisting of a Sunday suit of dark blue, a working dress, blue apron, white caps and collars. She has also a small allowance of pocket money. In case of sickness she is tenderly cared for, and when she becomes infirm or aged in the discharge of her holy duties, she knows there is waiting for her a room in the House of Evening Rest, the home for aged deaconesses. A deaconess attired in her garb, with the peaceful gentle countenance that seems distinctively to belong to her, is a pleasant sight constantly seen on the streets of German cities. Her deaconess attire is not only a protection, assuring her chivalrous treatment from all classes of men, but it is a personal commendation that serves her well as an introduction to opening doors that would otherwise remain closed to her. There are two classes of deaconesses formally recognized—teachers and nurses. The training given to nurses at Kaiserswerth may be said to have transformed the hospital wards of Europe. It was at Kaiserswerth that Florence Nightingale received the preparation that enabled her to render such wise and valuable ministrations in the Crimean war, and to render like service to the hospitals of England on her return. On the battlefields of all the more recent European wars, the deaconesses have been found caring for the wounded, ministering to the dying, taking messages for home friends who otherwise would never know the fate of their loved ones. They perform their holy duties with the serving love that does not spring from any outward motive or command, but from the impulse of the heart that genuine Christian love inspires.

Outside of nurse and hospital duties, there is a wide range of

activities performed by these devoted women of Christ's Church. Some have charge of refuges for Magdalens, others serve in penitentiaries and prisons, performing distasteful and difficult duties with patience and devotion. They do not shrink from positions of positive danger. The Kaiserswerth deaconesses have a right to be consulted before being assigned to cases of contagious diseases, but to the honor of these saintly women it can be said that no instance of refusal has ever occurred, no matter in what form of epidemic or pestilence the duty has been presented.

An important part of the deaconess work is to serve congregations under pastoral direction. Deaconesses who perform this service are known as parish deaconesses, and their work is held to be the consummate flower of the service of the diaconate, as it approaches most nearly to that of the deaconesses of the early Church.

In Paris on the Rue de Bridaine is located an establishment under the direction of the Calvinistic Church of France entirely devoted to the training of parish deaconesses. The older and larger Mother-House is on the Rue de Reuilly in the Faubourg St. Antoine, and is under the patronage of both branches of the Protestant Church of France. It is situated in a portion of the city that has been the haunt of the turbulent and revolutionary ever since the days of the Fronde. They have under their care a school, a hospital, a reformed school, and penitentiary, and from here the deaconesses go forth to the gloomy prison of St. Lazare, to have charge of the women in the Protestant division. The same story of patient love and ministration can be told of the French as of the German deaconesses.

In England the deaconess cause is making notable extension. It has now a place of its own within the Anglican Church, and outside of the London institutions, has homes in the dioceses of Canterbury, Chester, Ely, Salisbury and Winchester. Within the established Church, however, it is not to be denied that the sisterhoods have developed more prosperously than have the deaconess homes. There are in England many independent institutions that owe their origin to the loving faith and persevering effort of individuals. Such are the establishments of Dr. Grattan Guinness at Harley House in East London, the prison

mission of Mrs. Meredith, and Dr. Laseron's Hospital and Deaconess House at Tottenham. Perhaps, however, in the United Kingdom there is no institution so widely known or so extensive in its beneficent operations as the Mildmay establishment in North London. Outside of Kaiserswerth itself, none occupies a greater field or is doing more to commend woman's work to the Church in the line of practical benevolence.

In the German deaconess houses the larger number of the deaconesses are from the social grade that furnishes domestic servants, although there are also among them ladies of education, of cultivation, and of better social position.

But the English deaconesses in the large majority are ladies of gentle birth and manners, often of noble families, who put aside lives of ease and pleasure to devote themselves to the suffering sick and poor, "For the love of Christ and in His name." In the midst of the slums, the crime and destitution of the most wretched parts of London these holy women pursue their calling. The course of training is thorough and complete. Candidates are received the first month at the Probation House, that their fitness may be tested, and that they may examine themselves as to their motives and the strength of their calling. Those who are retained are sent to the training school, where a course of two years' training is generally pursued. Those who are to become trained nurses, attend medical lectures, and have hospital practice. In addition to the studies pursued it is expected that a portion of every day will be spent in practical work under the charge of an older deaconess. The Mildmay deaconesses, who are engaged in parish work under the direction of the clergyman of the parish, visit from house to house among the sick and poor, hold mothers' meetings, teach night-schools, conduct Bible classes separately for men, women and children; hold special classes for working women and girls who are kept busily employed during the day, and during the winter months have a weekly average of more than 9,000 attendants on their services.

They are resolving the problem of "how to reach the masses," by resolving the masses into individuals, and then influencing these individuals by the power of personal effort and love. Besides the hospitals under their care, there are Convalescent

Homes in the country, a Nurses' Institute at Malta, and a Medical Mission at Jaffa. There is also a railway mission for men on duty, and special work for policemen and postmen, besides other lines of useful work that we cannot take space to enumerate.

From England the deaconess idea extended to Scotland, where it has found a secure lodgment in the old historic Church of John Knox. With true Scotch foresight and prudence, the committee appointed by the General Assembly spent nearly three years in studying the entire question of woman's work with reference to the Church and at last evolved a scheme which was reported to the Assembly in 1886, and after farther consideration by the Assembly of 1887 was adopted and made a part of the organization of the Church. The entire work of women in the Church is divided into three divisions; the first and broadest is the Woman's Guild, that embraces members of Bible-classes, mission bands, school teachers, and workers of whatever kind within the Church. The next higher grade is the Woman-Worker's Guild into which none are admitted who have not attained a specified age, and who have not worked at least two years with the approval of the Kirk Session. The third and highest grade is formed of the deaconesses who must engage to make Christian work in connection with the Church the chief object of their lives, so long as they shall occupy the position of deaconesses. A Deaconess Institution was soon after opened in Edinburgh, and in the winter of 1888–9 three deaconesses of the Church of Scotland were solemnly inducted into the office. By its action the Scotch Church has formally recognized the deaconess as an officer of the Church, being the first of Protestant Churches to take that measure.

A plan similar in operation to that of the Church of Scotland was laid before the London Council of the Presbyterian Reformed Churches last summer and was commended to the churches represented in the alliance.

Certainly the form of Christian woman's service embodied in the office of the deaconess is assuming an important place in the Protestant Churches of Europe. Neither is it without influence in America.

The German Lutheran Church, influenced by the example of

the mother Church in Germany, was the first to endeavor to introduce into America the beneficent services of women deacons. In 1849, Fliedner himself accompanied four deaconesses who came to serve in a hospital in Pittsburg. The work so begun did not increase. The sisters received but few additions. More recently, however, the erection of the Mary J. Drexel Home and Philadelphia Mother-House of Deaconesses has given a new impetus to the movement among the Lutherans. The Mother-House in Philadelphia is strictly modelled on the German plan save that the Home is built with such magnificence and so provided with the comfortable elegancies of life that no deaconess house can compare with it, not even the Mother-House of all at Kaiserswerth. But outside environment is but an incident; the spirit within is the determining quality, and the Mother-House at Philadelphia preserves the features and maintains the spirit that constitute the value of the work.

In the Protestant Episcopal Church of America, the deaconess work was initiated at Baltimore. There are now two orders of deaconesses, and also different stations of work, although in America as in England, within the Episcopal Church sisterhoods are more influential and more rapid in their growth than are deaconess institutions.

In the Presbyterian Church the question of the revival of the office of deaconess has already claimed some attention, and a prominent professor in the Theological Seminary for many successive years earnestly recommended the revival of the office to the members of his classes at Princeton.

The Methodist Episcopal Church has gone farther. It has already taken action that places it the first among the evangelical denominations in America, and second only to the Church of Scotland in Europe, in that it has accorded to the deaconess a distinct status in the organization of the Church. In May, 1888, the General Conference passed the measure that has effected this result, and it is doubtful if any other measure taken at the Conference will be more far-reaching in its results than that which instituted the office of deaconess. The full and complete recognition accorded by the highest authority of the Church commended it to the people, who have already shown a remark-

able readiness to accept its provisions. Deaconesses' Houses have already been started or projected in Chicago, Cincinnati, New York, Boston, Philadelphia and Detroit, and many earnest Christian women have presented themselves as candidates.

Viewing the facts that have been presented to you, do they not awaken in your mind heightened respect for the aid that capable, devout Christian women can give to the religious uplifting of the civilization of our times? And is it not fitting that an Institute of Christian Philosophy which concerns itself with a wide range of subjects touching the welfare of the Christian Church, should give one evening to the consideration of this phase of woman's work in the modern Church? As ancient as the days of St. Paul, it is yet so modern that we in America are looking upon it as an innovation and speculating as to its future.

It has a future; we may be sure of that. Firmly fixed in the working forces of the Protestant Episcopal Church and protected by its highest dignitaries; cared for by the German Lutherans with a generosity and magnificence that its Fatherland cannot equal; become a working power in the great Methodist denomination, and recognized officially by the highest authority of the Church; adopted already by the Presbyterians of Scotland and England, and favored by men of influence in American Presbyterianism, the diaconate of women is bound in the near future to become a factor of Church life in America.

In this School of Philosophy, organized as has been said to get at those fundamental truths which concern society and men, it is well to have all questions discussed that can bring these truths home with vital power to the thinking men and women of this country. But after all, it is applied Christianity, the comprehensive fulfilment of the Divine command, "Thou shalt love thy neighbor as thyself," which is best interpreting Christ to the heart of humanity.

This it is that is to furnish us a new philosophy, and a new political economy. The most complicated questions of social life, the delicate equipoise of the social machinery of man working and man worked for; these are to be adjusted by learning that we are for one another, and not *against* one another. The

great mass of mankind are led by the opinions of a few leaders. The majority of men, if they had the inclination, would not have the time to study delicate questions of biblical interpretation, or weigh the merits of different systems of philosophy. As was said to us so eloquently by a speaker of the Institute, the masses can only be reached by way of the heart. Here it is that the deaconesses have their place.

Most of our pastors stand alone. They do not have the assistant curates and pastors that are connected with large city churches in Berlin and London. When the minister makes pastoral calls, and entering workingmen's homes, finds sickness and scanty resources, he has no deaconess to call to his aid, with her cheerful words of encouragement and her loving sympathy that are better than money and medicine. It is not charity alone that is wanted in such cases. It is the knowledge of how to use proper means to make the sick one comfortable; how to lessen the burden on the family that a small additional call for work and care has so sadly taxed; how to enlighten the ignorance that is so common, without wounding the susceptibilities that are so human. To quote the words of the Christ in Lowell's exquisite poem, "The Vision of Sir Launfal":

> "Not what we give but what we share,
> For the gift without the giver is bare;
> Who gives himself with his alms feeds thee,
> Himself, his hungry neighbor, and me."

It is for such ministrations that we need deaconesses in every evangelical Church in America. May the women that are ready to "publish the tidings" be "a great host."

Rev. Dr. Hovey was among those who made remarks at the close of Miss Bancroft's address, and by request wrote out the following statement:

"Woman's work in the Church is liable to be modified by denominational peculiarities. We have tried to solve the problem in the local church (Congregational, Bridgeport, Conn.). The matter was fully discussed at several meetings, till, by a unanimous vote, the office of deaconess was created, having the

same duties as those belonging to the office of deacon, with the single exception of administering the Lord's Supper. Thus an advisory board is constructed with four deacons and three deaconesses, each chosen by ballot for a term of years, at the end of which the officer is ineligible to re-election for one year. Before this board all matters of discipline must come, as well as the care of the poor, the sick and the afflicted in the parish. Monthly meetings are held, and oftener on occasion. The results are as happy as can be imagined.

"We also have a special committee of two, one gentleman and one lady, on work to be done in hospitals and jails. As this is outside work, it is not regarded as properly belonging to the deacons or deaconesses. It is, however, very efficiently done, and is carried on in co-operation with similar work done by other agencies. There can be no objection to extending this co-operation as far as there may be an opportunity for doing so. But however that may be, it is our conviction, sustained by experience, that the local Church needs deaconesses as much as it needs deacons, and that they should work together in the same board and with equal authority. I may add that the Park Street Congregational church in Bridgeport, Conn., of which these facts are given, has a resident membership of 450 members, and that they universally approve of the existing order of Church polity. Nothing would induce them to dispense with deaconesses."

"IS THERE ANY OTHER SCIENCE THAN PHYSICAL SCIENCE? IF SO, WHAT AND WHY?"

A SYMPOSIUM.

EARLY in the year the questions as stated above were sent to the Institute, with the request that they should be discussed. They were considered at a Symposium held on the evening of July 24th, 1889, at the Thirteenth Summer School, by Prof. Noah K. Davis, of the University of Virginia; Prof. Willis J. Beecher, of the Auburn Theological Seminary; Rev. Joseph Cook, of Boston; Prof. Francis H. Smith, of the University of Virginia; Prof. Simon Newcomb, of Washington, D. C.; Sir J. W. Dawson, President of McGill University, and Pres. Fairbairn, of St. Stephen's College, New York. The last-named gentleman was present and delivered his statement; the others communicated by letters. All are given below.

PROF. NOAH K. DAVIS, UNIVERSITY OF VIRGINIA:

This is a queer question, not so queer in itself as in the fact that there should be occasion to ask it. But indeed there is occasion, for many physicists in calling themselves scientists mean that they alone are scientists, that only physics is science. It is chiefly the small and noisy sort that talk so, yet as these are swarming like grasshoppers, it is time their way were crossed by fire.

Did the question concern merely the comprehension of the word "science," an appeal to any dictionary would settle it. Good usage makes the word generic, including physics as a species, even when physics is taken, as we are taking it here, in its widest sense embracing all natural or material sciences. A well known and approved definition, by one of the strongest thinkers of this century, is: "A science is a complement of knowledge, having in point of form the character of logical perfection, and in point of matter the character of real truth." In brief: science is knowledge systematized. Now under this definition physics can truly claim to be a science; but so can

economics, politics, ethics, logic, psychology, anthropology, sociology, ethnology, and other sciences of human nature; so, too, can metaphysics and theology, though perhaps our scientist would deny to these a basis of real truth. The very form of the names of all such branches of knowledge lays claim to the rank of science, and all correct speech and literature allow it. The silly disposition to narrow the term science has its counterpart in the rather ludicrous fashion, now found in young ladies' seminaries, of narrowing the term art. Drawing and painting is art. Not one of the fine arts, mind you, nor even the fine art, but art *solus*. The girls study music and art. Good! Now let the boys study logic and science.

If our scientist wished to specialize and appropriate merely the word, we might be patient, and wait to see what would come of it. But he is grasping at the thing. It is not that physics is pre-eminently science, which would be sufficiently arrogant, but that nothing else is truly science. The definition quoted above is accepted, and the claim made that physics alone fulfils its terms. Unwittingly, perhaps, he is under the influence of Comte. But positivism, which limits research to the laws of phenomena in general, is not so exclusive. It admits phenomena that are not physical to be made the subject of scientific investigation. But let us ask one or two questions. Is not pure mathematics a science? Is it not the very corner-stone of physics? Yet it is not itself at all physical, but wholly subjective, being the science of the necessary forms of imagination. Is not logic, inductive and deductive, a science? Has it not built physics? Yet it is not at all physical, but strictly subjective, the science of the necessary forms of thought. So, if physicists would not deny the paternity of their science, they must allow that there are genetic sciences most perfect in form and utterly ignoring material forces. Moreover, do they allow that God exists, that He is something greater than "Humanity," something more than "A stream of tendency that makes for righteousness," and not absolutely "Unknowable," but One of whose nature, will and work some things are known, then surely this knowledge can be formulated into a logical system, and theology vindicate its claim to rank as a science.

PROF. WILLIS J. BEECHER, AUBURN THEOLOGICAL SEMINARY:

By science the average man means, with Noah Webster's successors, "Knowledge duly arranged, and referred to general truths and principles." The subjects in regard to which men have commonly supposed that they have knowledge capable of being duly arranged and referred to general principles may be placed in three classes :

First, Material being, as existing in the form of inorganic matter, and in plants, animals, men, and other like forms of existence, if there are any, in our own or other planetary systems.

Second, Spiritual being, as existing in men and animals; that is to say, whatever is given in or through such phenomena as perceiving, remembering, knowing, judging, inferring, supposing, imagining, feeling pleasure or pain, inclination or disgust, hoping, fearing, deciding, choosing, accepting or rejecting moral obligation, aspiring, being ashamed, and the like, when these phenomena appear in connection with a material organization, palpable to the bodily senses.

Third, Other spiritual being, actually or potentially existing —God, angels, devils, disembodied spirits, and the like ; the question whether spiritual being exists, apart from material organizations such as are palpable to the senses, and all questions that spring from this.

If there is no science save physical science, then the second and third of these departments of study must either be excluded entirely from the domain of science or included within the domain of physical science.

As no one disputes that we are capable of having some knowledge in the second and third of these departments—some knowledge that may supposably be duly arranged and referred to principles, no one can logically give his suffrage in favor of excluding them entirely from the domain of science. It is true that a great deal of pretended knowledge in philosophy and in theology is as pretentious as it is unscientific ; but the same thing is equally true in physical science. Nevertheless, in each case, and in all the departments alike, a rigid scientific method will give genuine scientific results.

I have no objection to admitting that philosophy and the-

ology may be included within physical science, and legitimately held accountable to its laws, provided the admission be defined by the following propositions :

1. The term physical science, in this case, must be used in a sense broad enough to include all results obtained from all correct observing and classifying of facts of all possible sorts; it must not be confined to facts observed through the bodily senses.

2. There may be, in every department, knowledge that is real, distinct, and practically valuable, which is yet unscientific, in the sense that the one who knows it has not his knowledge duly arranged, and referred to principles. As this is admitted in reference to physical objects, so it should be in regard to immaterial objects of knowledge.

3. The true method of physical science requires, instead of forbidding, that every kind of evidence shall be admitted, provided it be evidence that genuinely gives knowledge; and that the sorts of evidence used in any particular case be those suited to the case.

If the term physical science be used in this broad sense, then it includes everything, and there is no other science possible; but if it is used in any narrower sense, then it is merely one of several departments of science.

But is not our knowledge of other than material things so illusive as to render it unfit for scientific purposes ? Well, that is to be determined as the result of scientific investigation, and not assumed as one of its prior conditions; and no one will ever reach the conclusion that all knowledge of immaterial things is illusive, unless he has first assumed this as a part of his premises.

REV. JOSEPH COOK, BOSTON :

Pure science is usually defined as knowledge based on the self-evident truths, as mathematics. But there are self-evident truths in the realm of morals and intellect as well as in that of physical phenomena. We may, therefore, properly speak of ethical science and mental science, as well as of physical science. To this phraseology, established and most reputable usage conforms.

Without manufacturing a definition for the occasion, science

in general may be defined as *reasoned knowledge*. By *reasoned* knowledge is meant truth methodically arranged and traced back to first principles, and based either on self-evident truth or on direct observation, or on both. With this definition, we must admit that there can be a mental, a moral and even a religious and theological science, as well as a mathematical, or a geometrical, or a physical science.

The self-evident truths of conscience are as capable of being developed into a science of ethics, and even into a science of theism and religion, as the self-evident truths of geometry into a science of quantity and measurement.

Exact observation is the method of science. But there may be exact observation of mental, moral and religious facts, as well as of physical facts. The former kind of observation may be more difficult, but really not less successful, than the latter.

The so-called scientific method, or investigation by exact observation, definition and induction, was the offspring of mental and moral science strictly so called, rather than of physical science. In the Greek philosophy the scientific method was first applied to investigations in ethics and metaphysics and afterwards to researches in physics.

A course of thought limited to the narrow bounds of physical phenomena is very arrogant when it assumes that its exact observations and inductions are science and that nothing outside of physics can be such. The very method followed by the physical observer implies trust in his own mental faculties. That trust can be justified only by an exact science of self-evident truth, which, of necessity, is the basis of all other science.

PROF. FRANCIS H. SMITH, UNIVERSITY OF VIRGINIA :

Surely not, if the materialist be right. And surely not, if the idealist be right; for there is but one kind of science if there be but one kind of substance, whether that be material or immaterial. In this view, the question proposed appears to be equivalent to the old one between Dualism and Monism.

This old question is a living one. The contention of a recent stirring writer, that natural laws extend without break of con-

tinuity to the spiritual world, and that what have been regarded heretofore as instructive *Analogies* merely, are really *Homologies*, seems to point distinctly to Monism—either idealism or materialism. Relations which pass without break from stones, plants and the like to thoughts and feelings, must at some point connect things of (what are called) different worlds. Now there can be no relation, where there is not some common measure, exact or vague; and there can be no common measure of things essentially different. Hence if natural law extends to the spiritual world, either all substance is matter or all substance is spirit, and there is but one kind of science.

The question, "Is there any other science than physical science?" has significance, however, for those who, with the great mass of mankind, learned and unlearned, accept both the reality of mind and the reality of matter. For them the question means, "Is there a science of mind?" If there is not, it must be because science does not find proper *materials* in the spiritual world or because scientific *method* is inapplicable to the materials.

The materials of science are facts. It would be absurd to deny that the spiritual world furnishes these in rich abundance. The phenomena of mind, as given in consciousness, are as certain and various as the facts of perception. If there be no true science of mind, it cannot be for defect of materials.

Is scientific method inapplicable to these materials? Bear in mind that science has for its highest object the discovery of law. It seeks to rise from particular facts to general facts. In its infancy, it is content with mere classification. In its advanced stages, it passes from this statical phase into its dynamical aspect and rises to the ideas of growth and history, contemplating the world as a theatre and not a mere panorama. The establishment of law involves, *in its completest specimens*, three processes, logically and actually successive. These are called briefly, Induction, Deduction, and Verification. But while these three steps have been taken with some physical laws, they have not been taken with all. Many laws rest and perhaps will always rest upon the first process alone—viz., induction. The *method* is not unscientific. It is merely *incomplete*.

Now it must be admitted that the facts of the spiritual world do not clearly permit the employment of the second and third processes—deduction and verification—in the establishment of spiritual laws. The phenomena of mind are not amenable to exact measurement. Their quantitative relations are too refined for us to grasp. The science of mind is limited to generalizations made from a survey of facts, and these generalizations cannot, in the existing state of things, be tested by a vigorous comparison of their necessary consequences with actual phenomena. Yet if for this reason we must deny the title "Science" to the systematized knowledge of mind, then we must also deny it to three-fourths of the so-called physical science of the day. For mineralogy, botany and the natural history sciences generally, no more admit of these second and third steps than does psychology. With such an arbitrary limitation of the term science, there would be almost no physical science, save mechanics and astronomy. Such limitation conforms neither to usage nor propriety.

I conclude, therefore, that there *is* other science than physical science, and that the systematized knowledge of the phenomena of mind (embracing language, law, and the like) has a right to be called Science.

PROF. SIMON NEWCOMB:

CRAWFORDS, N. H., July 22d, 1889.

MY DEAR SIR: I have had so many things to think about the last few months that they have knocked the subject of your symposium quite out of my head. And I cannot yet see what there is to discuss in the question. How could any sensible man pretend that there is no other science than physical science? Is not mathematics science? Are not political economy and psychology taught as sciences in all our colleges? But none of these are physical sciences in any proper sense of the term. Perhaps there is something about the question which I don't understand; if so, there is no time to find it out.

If this letter will do as a contribution, you are welcome to it; it is all I can say at present.

SIR J. W. DAWSON wrote:

April 29th, 1889.

DEAR DR. DEEMS: I do not think I can write on the question proposed, because I do not understand it. I can imagine an idealist holding that there is no external world and consequently no physical science in the ordinary sense of the term, but I cannot imagine the extremest materialist so mad as to deny the existence of his own mind, and so to say there is no mental science. The *I* which thinks and produces science must surely exist, and be itself a subject of study—otherwise there can be no thought at all.

At the moment, however, I am overworked with college affairs, and incapable of attending to anything scientific—and perhaps you may enlighten me as to what the question means in the summer vacation, when, if not previously killed by overwork, I may have time to think.

R. B. FAIRBAIRN, D.D., President of St. Stephen's College, at the close of the reading of the letters made substantially the following remarks:

I beg to suggest that the question may have been somewhat mistaken. The possible meaning of it may have reference to the application of the scientific method to a variety of subjects—to moral, psychological, and material subjects; and then the question arises whether this method may be equally efficient in each subject. Some persons may suppose that it is more applicable to material nature than it is to mental and spiritual subjects. For instance, whether the scientific method is not much more applicable to astronomy than it is to psychology.

The papers which have been read take quite the same view of what science is. The definitions do not materially differ. Dr. Porter in his work on the Human Intellect says that science is exact observation, precise definition, fixed terminology, classified arrangement and rational explanation. Now this method is applicable to any subject which comes under our observation. We can classify the facts of material nature and give them an intelligible terminology, and we can give a rational explanation of them. We can also classify the facts of mind, and give a ra-

tional explanation of them. And in each case we have a science; the one may be the science of dynamics, the other the science of the human intellect.

So far there would appear to be no difference of opinion. But the application of the scientific method to each of these subjects is not the same. For instance, astronomy gives us knowledge of a very exact kind. We can calculate all the eclipses which have taken place in the last four thousand years, and we can calculate all those which will take place for the next ten thousand years. The scientific method justifies its name as applied to astronomy. It is knowledge of the past, and it gives us knowledge of the future. But when we say that meteorology is a science we do not mean that it is a science in the same degree that astronomy is. It does not reveal the future except in a very limited degree. We are fortunate if we can predict the weather for twenty-four hours. When we come to forty-eight hours, or seventy-two, our science fails us. It ceases to be science, or knowledge. It is simply a guess. So we ask the question sometimes whether meteorology can be called a science. It is such only in a limited degree. The difficulty is that so many influences come in that we cannot foresee. The same is true of chemistry. Inorganic chemistry has become a very exact science, rivalling astronomy, but organic chemistry furnishes only a knowledge of what exists, and cannot produce the tree or the shrub.

But now the question arises whether we can so classify the facts of the soul and name them, and put them into the rational relations. When the preacher or orator deals with men he does not do so at hap-hazard, but he does so in an exact manner. He takes into account the principles of the soul, and he argues with men or attempts to persuade them from a knowledge of those facts of the mind on which human action depends. The preacher or the orator brings forward only those motives or those arguments which will lead to the results at which he is aiming. He may fail, just as the meteorologist fails, because there may enter into the mind some subtile influences which may counteract his logic or his rhetoric.

Now when we see the failure which is created by these un-

seen influences which we have not detected, we are very apt to ask whether any subject can be brought under the scientific method but material nature, which can be exactly measured and weighed.

It appears to me that it is this which has inspired the question. And the information asked is whether the scientific method can be as rigidly applied to psychological subjects as it can to material subjects.

IN the heavens we discover by their light, and by their light alone, stars so distant from each other that no material thing can ever pass from one to another; and yet this light, which is to us the sole evidence of the existence of these distant worlds, tells us also that each of them is built up of molecules of the same kind as those which we find on earth. A molecule of hydrogen, for example, whether in Sirius or in Arcturus, executes its vibrations in the same time. . . . No theory of evolution can be formed to account for the similarity of molecules, for evolution necessarily implies continuous change, and the molecule is incapable of growth or decay, of generation or destruction. None of the processes of nature, since the time when nature began, have produced the slightest difference in the properties of any molecule. We are therefore unable to ascribe either the existence of the molecules or the identity of their properties to any of the causes which we call natural. On the other hand, the exact equality of each molecule to all others of the same kind gives it, as Sir John Herschel has well said, the essential character of a manufactured article, and precludes the idea of its being eternal and self-existent. Though in the course of ages catastrophes have occurred, and may yet occur in the heavens, though ancient systems may be dissolved and new ones evolved out of their ruins, the molecules out of which these systems are built—the foundation stones of the material universe —remain unbroken and unworn. They continue this day as they were created, perfect in number and measure and weight; and from the ineffaceable characters impressed on them we may learn that those aspirations after accuracy in measurement and justice in action, which we reckon among our noblest attributes as men, are ours because they are essential constituents of the image of Him who, in the beginning created not only the heaven and the earth, but the materials of which heaven and earth consist.—*From Prof. Clark Maxwell's Address*, 1883.

AMERICAN INSTITUTE OF CHRISTIAN PHILOSOPHY—WHAT IS IT?

[Extracts from the Anniversary Address delivered before the Institute July 24th, 1889.]

By Rev. Dr. Deems.

TO ascertain whether there was enough interest in the subject to justify an attempt to form a society specially devoted to the creation and distribution of a literature illustrating the relations between science and religion, in the summer of 1881, at Warwick Woodlands, on Greenwood Lake, in New Jersey, there was delivered a course of lectures, beginning on the 12th and closing on the 22d of July. The following were the lecturers: the Rev. Dr. Deems, of the Church of the Strangers; President Noah Porter, of Yale College; Prof. Bowen P. Bowne, of Boston University; Prof. Stephen Alexander and Prof. Charles A. Young, of Princeton; the Rev. Dr. A. H. Bradford, of Montclair; Prof. Alexander Winchell, of the University of Michigan; the Rev. Dr. Lyman Abbott, of the *Christian Union;* the Rev. Dr. J. H. McIlvaine, of Newark, N. J.; Prof. B. N. Martin, of the University of New York, and Prof. John Bascom, of the University of Wisconsin; in the order of their names.

The whole expense of this course, which was liberally maintained, was borne by Mr. William O. McDowell, of New York.

ORGANIZED IN 1881.

It was so successful that on the 21st of July a meeting was called for the purpose of organizing the American Institute of Christian Philosophy. At its organization Rev. Dr. Deems was elected Provisional President, Rev. Dr. Bradford, Provisional Secretary, and Mr. Wm. O. McDowell, Provisional Treasurer. President McCosh, of Princeton, and President Battle, of North Carolina; Bishop Cheney, of Illinois, and Bishop McTyeire, of Tennessee; Prof. Bascom, of Wisconsin, and Gen. G. W. Custis Lee, of Virginia, were the first Vice-Presidents. The first

monthly meeting was held at Warwick Woodlands on the 28th of August, 1881. The second was held on the 29th of September, 1881, in the parlor of the Church of the Strangers, 4 Winthrop place, New York. The officers of that church have generously provided an office and a place of meeting for the Institute from the second monthly meeting to this date. The number of members to-day exceeds 400, including many of the most distinguished thinkers in Europe and America.

PAPERS AND LECTURES.

During the eight years monthly meetings have been held regularly and papers read except in the summer months. At those meetings there have been fifty-nine papers read. Two sermons have been delivered before the Institute in the city of New York, one by the late Rt. Rev. Bishop Harris, of the Diocese of Michigan, on January 18th, 1885, in St. Thomas's Church, Fifth avenue, and another by the Rev. Jacob R. Day, D.D., on February 21st, 1886, in the Madison Avenue Methodist Episcopal Church.

BISHOP POTTER.

At the delivery of Bishop Harris's sermon Bishop Potter presided and followed the sermon with remarks expressing his interest in the Institute and its work and his hearty co-operation with it. He thanked the preacher for his admirable address and said that the Institute of Christian Philosophy had been organized to get at those fundamental truths which more especially concerned society and men. Its members were not confined to any one denomination, but embraced, in addition to various bishops of the Episcopal Church, eminent scholars and professors throughout the country. In speaking of what the Institute is doing, the bishop said that its publications had already been sought for by some of the scholars in Japan, who were now especially turning their thoughts to the Christian religion as the religion of the country.

SUMMER SCHOOLS.

The Institute has held thirteen summer schools, the first and second at Warwick Woodlands, the third at Atlantic Highlands, the fourth, sixth and eighth at Richfield Springs; and the

fifth, ninth, tenth, twelfth and thirteenth at Key East; the eleventh at Round Lake, and the seventh at Asbury Park and Key East: at these 101 lectures have been delivered.

Two courses of lectures were delivered in the Broadway Tabernacle Church in the winters of 1882-83 and 1883-84.

COLLEGES REPRESENTED.

These one hundred and sixty-nine lectures have been prepared with great care and many of them by our foremost thinkers. The lecturers have represented the following colleges, namely, Bowdoin, City of New York, Columbia, Dickinson, Emory, Hamilton, Lafayette, Rutgers, Smith and St. Stephen's, and the following universities, namely, Boston, Cornell, Harvard, New York, North Carolina, Pennsylvania, Princeton, Texas, Vanderbilt, Virginia, Wisconsin and Yale. In addition to the presidents and professors from these colleges, other gentlemen of other learned professions and some intellectual men in business circles have contributed to the literature called forth by the Institute, among them the distinguished explorer, Hormuzd Rassam, of England, and the acute thinker, Ram Chandra Bose, of India.

CHANCELLOR MACCRACKEN.

These valuable productions of the Institute have been issued periodically and now constitute six large octavo volumes, of which Dr. MacCracken, Vice-Chancellor of the University of the City of New York and Professor of Philosophy, says: "The lectures and magazines it [the Institute] gives each year are themselves almost a Faculty of graduate philosophy for the whole country." The lectures and other papers and the transactions are issued in a bi-monthly called CHRISTIAN THOUGHT, a copy of which is sent to all members. It has also a large list of subscribers among those who are not members of the Institute.

The work of this Institute cannot be computed in figures. It has made a noble stand against materialism and all other forms of false philosophy. It has presented an array of talent which shows the world that all the brains are not on the side of those who scorn or who neglect our holy faith, but that the very best intellects of the world, the most competent judges among men, are on the side of the truth as it is in Jesus. It has strength-

ened the faith and courage of the young men of colleges, among whom its publications have been distributed. A physician who cures many patients can make a resounding reputation, while almost none but the most thoughtful place proper value on sanitary prevention. Therefore the Institute has not attracted the attention of the masses, and has none of the aid which comes to other valuable institutions by reason of the conspicuousness of results. It must, therefore, appeal for its support more to the few who are able to value the solidity of a foundation than to the many who casually admire the beautiful outlines of a structure and the brilliant frescoes on its ceilings.

MEMBERS AND ENDOWMENT.

The Institute invites to its membership men and women, learned and unlearned, all who wish by their names and fees to aid in its good work. That one cannot contribute to the production of its literature is no more reason for not becoming a member of the Institute than the fact that one cannot produce such writings as the prophecies of Isaiah or the Epistles of Paul is a reason for not becoming a member of the American Bible Society. The annual fee of $5 helps to stem the tide of infidelity. The prospectus says: "The names and fees of 10,000 Christians sent us in one year would help us to push the battle to the gates."

There are no honorary members. There are no expenses for rents. There are no salaried officers. No other institution can be managed more economically.

The Institute has commenced an endowment fund, to which $7,000 has been paid or pledged. A New York layman has offered to contribute $5,000 to the endowment, provided $15,000 more be pledged before the close of this year. There should be no difficulty in that. If each member gave or secured $50 the work would be done. There are no expenses for rents. There are no salaried officers.

Those who contribute $100 become members for life and will receive the Society's publications gratuitously in perpetuity. One thousand dollars will establish a lectureship to bear the donor's name; and he may annually nominate the person he wishes to deliver the lecture. Thus will be created a fountain

of blessings to the world which will continue to flow when we shall have passed from the work on earth.

It is desired that each member shall give or secure for this Fund at least fifty dollars this year; but any subscription will be thankfully received.

Let every reader of CHRISTIAN THOUGHT send for a subscription blank.

THE CASH VALUE OF CONSCIENCE.

[Delivered before the American Institute of Christian Philosophy, Dec. 6th, 1888.]

BY GEO. MAY POWELL, PHILADELPHIA, PA.

MECHANIC science classifies certain forces as "imponderable," such for example as percussive force, or as the eccentric circle. The power of a lever, or of compounded levers; of the screw, or the axle, can be estimated with mathematical precision. But percussion—or the power of a blow—combines such intensification of forces that it cannot be accurately estimated. It is consequently designated as "imponderable." Therefore the active, intense efficiency of percussion or the crushing vigor of the eccentric are here accepted as typical—though feebly so—of that measureless power called conscience. Its efficiency as a factor of secular values and secular forces is simply immeasurable. These elements of its force are of course considered by us as meagre in comparison to its strictly moral qualities and offices.

By parity of reasoning, the culture, or the sustaining of whatever creates and develops conscience, is good economy of force. And whatever stifles or benumbs conscience or neutralizes or hinders the working of influences that develop and build up conscience is at enmity to the best financial and political interests of nations and of individuals.

Some definition of conscience is desirable, however. There seems to be good foundation for believing that this force moves in right lines, and also in lines that are tangential to right lines. It is a combined mental and moral influence which leads men to decide to do or not to do. As it combines mental and moral

qualities, it necessarily follows that it can be educated, and that this education can be either in right or in wrong directions. One who made the sea and the stars tells us, "The time cometh that whosoever killeth you will think that he doeth God service." A brilliant and logical as well as learned Romanic Jew wrote—after his conscience had received right training—that he was "not meet to be called an apostle, because I persecuted the Church." Yet this persecution, even unto cruel torture and death, was when conscience was the mainspring of his action. But that was perverted conscience. If to have moral value it should be rightly educated, it follows that its true culture is necessary to secure material values as results of action; and that wrong education of it must be an energetic souce of material as well as moral loss. In financial phraseology, wrong education of this subtle and mighty force is "a bad investment." Its cash value is a minus quantity. It figures on the wrong side of a balance-sheet.

In developing this line of thought in this paper, we shall deal very little with theory. Practical illustrations, either positive or negative, will form the majority of its suggestions.

Here, for example, is a man who is the chief manager of a great trunk railway. Interests are in his hands worth tens of millions of dollars annually. If he is uncompromisingly conscientious in the care of trusts committed to him, the *bona fide* owners of that road will realize millions of dollars more per annum than they will if he is not conscientious. It is therefore plain that conscience, in this particular man, has very great cash value to the owners of that road. The chief being conscientious, he will instinctively aim to secure the same quality in his subordinates. Thus will those whom he selects be measurably like him in this respect and in others germane to it. A vigor and vigilance born only of conscience will be felt in receiving and disbursing departments, in construction and repairs, in the telegraphic and every other arm of the service. Accidents which cost stockholders from $100,000 to a million apiece will be rare. Wheel-within-wheel contracts for material, or supplies, or transportation will not hocus-pocus the real owners of the road out of their just dues, while he is at the helm, if he can help it.

With his corporation, as with an individual, it is not what is made but what is *saved* that becomes fixed capital. And honest watch-care to prevent little losses at every point of their plant intrusted to his assistants, will be effective exactly in proportion to his and their conscientiousness.

Rigid economic regulations, exactingly applied, and eagle-eyed vigilance are good in their places. And an executive who is a thorough disciplinarian, may flatter himself that he can compel the strict attention to duty that will ensure all this as a matter of routine. But sure we may be that unless conscience, as a high moral principle, is the mainspring in it all, the whole work, in economic points of view, will be like lifting at the short end of a lever. The intangible losses, great and small, will combine an annual aggregate ever tending to keep dividends down to the vanishing point. Right here is the central soul of a financial puzzle, Why do the average plants of our commoncarriers so often pay small dividends? Doves are not hatched from hawks' eggs.

"Expediency" is the great slogan of the Father of Lies. There is said to be "honor among thieves," but the Great Enemy, ever since he cheated a sinless pair who lived in a beautiful garden, has always devoted himself to betraying his followers. He has ever since been demonstrating the accuracy of a proverb that teaches "honesty is the best policy." Expediency in political or in business affairs is often the antipodes of that conscience in things secular which is the sole condition of real success in them. Like the boomerang, it is very likely to hurt the one who throws it; or like some recoiling old musket that does more damage to the man who fires it than to the man at whom it is pointed. Expediency led the managers of a certain railway in which the late William E. Dodge was interested to decide to run Sunday trains. This was at a time when the stock of that road was worth 135. Mr. Dodge then sold his stock. Erelong it was selling at less than 10. Able railway and steamboat managers of long experience assure us that running Sunday boats and trains "makes the men reckless, and so is the cause of many accidents." Accidents, as before set forth, are enormously depletive of dividends. Expediency is the "will-o'-the-wisp" which

has led railway and other corporations to trample on conscience by seeking bribe-bought legislation and by other *not* doubtful measures. Of course this must be accomplished through able and trusted representatives. If the consciences of these representatives were not debauched before, their agency in such transactions debauches them. Now the cash interests of stockholders in that corporation are in the hands of those who were capable of work that will not bear daylight, or in the hands of those who employed others to do it. The paralyzing effect of such work on the public conscience reaches the masses of that and of other corporations. Consequently a condition is created rendering it hard to secure employees in any department who can be trusted. This necessitates the creation of expensive guards which are not guards; for the guards are in the hands of those whose consciences (in common with that of a mass of which they are part) are worm-eaten by the initial demoralization. Reprisals, too, are the fruit of such expediency work. Legislators, having been taught "addition, subtraction, division and silence," are ready next time to heed advances of a rival corporation. Uniform freight and passenger rates are settled in trunk line convention, or rates of prices and wages in commercial and manufacturing agreements. But expediency whispers to one party to the contract (which may have been an equitable one), "Underbid and make money." So the contract is broken, and a long and expensive war of rates not only depletes the dividends of stockholders but very often annihilates principal as well as interest by smashing the corporation. Stock-watering operations are usually as disastrous to those whose money created the plant as a smash-up. The hawks' eggs have not hatched doves in either case. Expediency plausibly suggests "We must (as the saying is) fight the devil with fire." In other words, if a person, or a corporation, or a party politic finds interests in jeopardy, and bribery or other conscienceless work seems necessary for safety, it must be made use of or the opposite interest will do so. This is tantamount to saying that the Almighty is not able and willing to stand on His universal platform of truth, and take care of the right. Expediency inspires election bribery, and every man having a hand in the same has helped to plant chronic disease

in the conscience of the masses of our people, and thus he has undermined the very foundations of all commercial affairs and sown the seeds of financial unrest that develop into panics which wreck the fruits of decades of honest toil. Such a man is a more terrible public enemy, in a pecuniary point of view, than one who should maliciously scatter yellow fever microbes in a metropolitan city. In his political influence, he strikes most deadly blows at the national life. He cuts at the very roots of the tree of liberty planted at Valley Forge and at Gettysburg, and so becomes a most efficient enemy to the *race*, as well as the nation; for liberty without conscience is anarchic license, than which no more terrible or costly tyrant is known to history. Conscience is the chief mainspring of a vigilance which is able to thwart it. Go up and down the commercial highways of our great cities and read what (to some extent at least) is an answer to this financial heresy, in the names of Israelites over the stores and banks where we used to read the names of those to the manor born. Read it in the intensely significant mercantile statistics which show that over nine-tenths of those who go into business, go to the wall. See, too, how nearly, if not quite, universal it is that houses which stand to the second and third generations were planted by their founders on the idea that conscience *had* cash value. Few men are so base as not to have honest pride in the houses or the corporations which they plant continuing in their hereditary line for generations thereafter. Those and only those so stand which sail by the pole star of conscience. We were once the guest of a commercial house in Italy, which is said to have stood the strains of political and financial upheavals for more than seven centuries. It need not be asked whether the founders of that house and their successors questioned the secular value of conscience.

In this golden-calf, almghty-dollar era, it is pertinent to suggest that the Golden Rule(considered *exclusively* on its sordid side) is, in the long run, the one that will make the most money. This has been proved by the "logic of events" in all ages. The conscience and the cash sides of this question run parallel and close together, no matter to what extent they are prolonged. Like the twin lines of steel over which speed the wheels of our stu-

pendous nineteenth century railway traffic, they are the support of all that is truly and permanently prosperous in all departments of business. Common carriers, and those who buy and sell, earn or pay wages, drive the plow or ride the waves—all these find that just in proportion as these lines are kept parallel and close together there is substantial gain. The instant the cash and conscience lines depart from each other (even a hair's breadth) there is danger of derailing the financial car. The roar and the crash of war between labor and capital has its rise and gathers its fury in forgetfulness of this axiomatic truth. The moment the anti-golden rule of selfishness begins to control there is material death ahead. Perverted conscience that led to undue self-seeking has ever been the obstruction on the track which has wrecked the wealth and the power of man. An Egyptian king would not believe this till the Red Sea wave was the winding sheet of him and his hosts. Persia blinded her eyes to this eternal truth till the battle of Arbela broke the spell. Carlovingian conquests, and later those of the great Corsican, spread the standards of France till all Europe was under their shadow. But (as depicted in the burning words of an American statesman) "France would not rule in righteousness, and the God of nations decreed that she should return to her old eyrie between the Alps and the Pyrenees."

If it is suggested that this paper was expected to deal more with individual and corporate affairs than with national issues, we reply that these vast interests represent the aggregations of acts of individuals or of circles of them. Every man, woman and child is either a sound or an unsound brick in the national bulwark. The weakest link in a chain is the measure of its strength, and ancient, mediæval and modern nations have been strong or weak exactly in proportion to the conscience of their people. In proportion as a people is morally strong is there cash value to individual and to corporate interests. This is more true of a modern republic than of a nation ruled by an ancient despot, who could grind even righteous masses to the earth by brute force. Therefore individual and corporate responsibility is broadened and intensified by the simple fact of life in a free land. We include corporate responsibility, because right here is a most ac-

curate index on the dial of national conscience. When corporate officers and directors, or stockholders even, sneak behind an assumed irresponsibility in corporate action that is unjust, they are false to public as well as private trust. The trite saying, "Corporations have no conscience," has become a proverb among men. This is only another way of saying that the average of individual conscience has become so blinded and benumbed that in the votes of stockholders and the acts of managers the right may be trampled in the mire and no one be to blame. But it is no less sin in the ethic sense, and also unwise financial policy, than as if an individual had lied or stolen. The corporation, like the individual, has solid cash foundation exactly in proportion to the conscience in force in the acts of its stockholders and managers. This in turn is the index on the dial indicating national vitality. These are times when manufacturing, mercantile, transportation and mining affairs, and those even of agriculture, are coming under corporate control. A nation is now almost as much an aggregate of corporations as a few decades ago it was an aggregate of individuals. Hence the importance of emphasis on the duty and the policy of each man remembering that his responsibility is not obliterated by his being a manager or a stockholder in a corporation. And that if neither Christianity nor patriotism will lead him to do right, his greatest material gain will be subserved by his doing so.

We hear much in these days of danger from the anarchist. But in proportion as we have clearness of mental vision (to say nothing of spiritual insight) we shall see the truth of what an accurate observer of affairs has recently well said (in substance) that "The most dangerous anarchist is not the ignorant and intoxicated foreigner who jumps up on a beer barrel and proposes to kill everybody, and burn and blow up all around him. It is rather the so-called respectable citizen, who within the letter of law, breaks its spirit." Joseph Cook voiced the same idea when he said, in substance, that "There is no more dangerous citizen than a New Englander who has lost his conscience." It is more foolhardy than wise to sneeringly refer to the sturdy morals of the Puritan by talking about mythical "blue laws." The blue stocking, sometimes spoken of as an emblem of those laws, is

safer, in financial senses, than the ring-streaked and speckled sort, typical of that kind of morals which is characteristic of those who prate about blue laws, but who see no harm in much of the betting and the stock-gambling operations of our day. Just where the line between legitimate stock operations and stock-gambling is to be drawn may be as difficult to be told as when a lamb becomes a sheep. In the eye of Dives, Jr., the young man or woman who keeps the Sabbath, and who gives wide berth to theatres, dances and card tables, may be a "wall flower"; but Dives, Sr., is more likely to select his confidential clerk from that kind of stock (if in these latter days he can find it) than from any other. "I have come to believe this or that (doubtful act) is right," often amounts to saying, "I want to do it, and I will"; or, "I don't want to follow the conscientious old ways of Puritans, and I won't."

If this seems to savor of impracticable simplicity and severity, we venture the assertion by way of rejoinder, that Count Tolstoi would not exchange his present mode of life for that of other days. He finds, as citizen-patriot, more peace and solid comfort in his peasant's blouse and single-hearted life, than he found aforetime in robes of splendor and the giddy whirl of court dissipation.

> "Self-denial is a rugged plant,
> But it yieldeth luscious fruit."

The object-lesson given us by this rich and gifted Muscovite, is also a nineteenth-century voice in the wilderness which it were well for all Christendom to heed. It has in it the key to unlock the mysteries of our industrial unrest. Perchance, likewise, the key to a Christ-likeness which, when earth's evening comes to the soul's, will open for it the gates of eternal morning.

If the foregoing has not given approximate guage of secular values of conscience, let us look further into the industrial war previously suggested. Strikes, lockouts and boycotts are among the methods by which this war makes itself felt. Able specialists, such as Hon. Carroll D. Wright, chief of our National Labor Bureau, says: First, that these methods are only symptoms of a deep-rooted disease. Second, that diagnosis of this disease shows its cure is essentially a question of ethics, *i. e.*, when each

side has the conscience to be willing to do as it would be done by, there is nothing more to be discussed. This brings us back to our starting-point. Conscience is the only safe basis of all the many millions of money involved in these labor troubles. If so, whoever does aught to paralyze either individual or public conscience, is an enemy to the best interests of both laborer and capitalist. This, however, is glittering generality. Like the fire of a blunderbuss, it may hit the right mark and it may not. Let us try to be specific. We cannot afford to be mistaken. Analysis of almost any strike, or lockout, would develop facts and philosophies not unlike the following, to wit: Some millions of dollars have been lost on either the labor or the capital side in the case under consideration. It would not be easy to find one of much magnitude where the loss has not been heavy on both sides. Though as capital cannot be cold or hungry, get sick or die—in physical senses—it usually has very practical advantage over labor in these upheavals. But it suffers loss of some millions. That strike or that lockout occurred because one side —or both—would not do right by the other. This being so, every million lost to either side measurably indicates the cash value of conscience in the case under consideration. If, on the other hand, conscientious action prevents such a catastrophe, the millions saved from loss show its value on the other side of the balance-sheet.

Not at all infrequently the positive or the negative action of conscience in some one man, representative of either the labor or the capital element in the case; is the root of action. If the action is wrong, it is most likely to be because conscience in the individual in question, became perverted gradually; also, that the point of beginning of perverted growth, was far back in the unfaithful teaching of parental precept or example; or it was in some time-serving preaching of a pastor who was bullied into shunning to declare the whole council of God by the ease and vice-loving sentiments of a rich contributor to his salary; or of similar ill-starred teaching of moral obliquity by a nominally religious paper which was accepted as an oracle in the home where he was reared, criminal silence on a moral question by preacher or editor, or in the every-day life of one in the laity who was

looked up to. Any one of these causes may have been the starting point in his ethical slack-twistedness of personal character, which finds expression in the injustice which caused the labor trouble that cost millions of money and incalculable physical suffering and still more immeasurable moral wreckage, that drove bright young souls into the outer darkness of shame and of crime. The moral disasters incident to these troubles imply the awful responsibility of soul-blood somewhere. At this point in the problem the secular value of conscience has a ghastly lack of weight in the balances.

We see by the foregoing suggestion of possibility at least, that a large share of responsibility sometimes rests with one who lived years before the evil fruitage that cost so much. Therefore, too, the near or the remote future welfare of our families, and of our country, rests on the quality and the keenness of our conscience, to-day.

It is no more self-evident that "a straight line is the shortest one between two points," than that "prevention is better than cure." For this reason influences which tend to cultivate pure, high-toned conscience in the individual, the community, and the state, are first class investments. Every dollar invested in foreign missions comes back to us an hundredfold. This, not as a figure of speech, but as a mathematical, mercantile verity. Fully the same scale of profit attaches to every dollar put into home missions and city missions, and the various humane and moral works for conserving the welfare of those who are tempted, or unfortunate, or ignorant. Some of our great railway managers have sufficient breadth of mind and heart to see, for example, that it paid their corporations to sustain Y. M. C. A. work among their employees. It made them so much more efficient and trustworthy, that the money they put in to sustaining such work among them returned dividends many times as great as the legal interest on money—thus literally and very practically demonstrating the cash value of conscience culture. The various home and city missions referred to add in corresponding degrees to the safety and the value of investments of both fixed and floating capital in mercantile, or manufacturing, or real estate operations in the immediate circles of their influence. This being so,

paying money for their support is far more really a business investment than a gift. It is perhaps not inappropriate in this connection to examine ourselves in respect to the way in which we receive those who suggest such investments. If called on by a representative of a mining or a manufacturing enterprise, which has respectable promise of paying ten per cent., he is made welcome when he calls to give an opportunity to invest in the same. He does not dream of a notice, "Beggars and peddlers not admitted," posted on the door of a business house, applying to him. Is it always so with the man (or the gentlewoman) who comes to give an opportunity to take stock in some enterprise for conscience culture and conservation which can be *proved* to pay 100 per cent.? This negotiator is too often received with a coolness —if not severity—to make one prefer earning the money for the good cause represented, to soliciting for it. He is freezingly told at noon, by a party he meekly asks to consider a good cause, that he has "given to one beggar and another, till he and his family are suffering, as the result." An hour after, this same "impoverished" individual, buys steamship tickets to start on a three months' $25,000 spree with his "suffering" family. How much value in cash (or anything else) has the kind of conscience possessed by him, and by many others like him? They have made their record in these lines, and will one day review them in the presence of One who will sum up the case by telling them "Inasmuch as ye have done it unto the least of these, My brethren, ye have done it unto Me."

Closely related to the commercial profits of home and foreign missions is the obverse side, which lies in the shadow. Every dollar's worth of intoxicating liquor, which a certain so-called class of "business men" export to Africa and other mission fields, kills $100 of that legitimate trade which is the life of honest labor and of capital in Christendom. The same ruinous maleconomic scale applies to home trade in intoxicants. When the hundreds of millions now thus worse than wasted is spent in the fruits of legitimate industry in the United States, our merchants and manufacturers and the masses of our people will see morning light flushing the dark night of grinding financial conditions. Local option gave measurable prohibition to a certain southern

village, and its merchants took in $5,000 more, in cash, each Saturday night thereafter than before. This straw in the wind shows that when any political party or combination of parties has the conscience to give honest trade and industry a similar chance, a stupendous amount of cash will change from circulating in unhealthy currents to those of vigor and health. Every farmer and mechanic, every merchant and manufacturer, every railway and other legitimate corporation, has more practical dollar and cent interest in this cash side of the conscience question being acted on as here suggested, than in any other material subject that can be named. Our misguided brethren now engaged in the manufacture and sale of intoxicants, have the ability to make as much money as they now do in useful avocations. In such an era of prosperity as would dawn with the exit of their present work of ruin, that ability would assure them far greater gain—an era prophesied by Abraham Lincoln, and an era which is surely coming.

In conclusion, we reaffirm that there are no investments at all comparable, in point of cash profit, to those the object of which is the cultivation of right conscience; and that there is no more dangerous enemy to commercial and industrial interests than timid and time-serving conscience culture.

Goethe said: "Strive to encourage the beautiful; the useful will encourage itself." He might accurately have added the exhortation to encourage it, because—in sordid senses—it will pay to do so. Can this be true in the æsthetic sense, and not be so in the higher realms of ethics?

Fifty dollars judiciously expended in planting forest trees around a humble, rural home, not infrequently adds in less than a score of years an hundred times fifty dollars to the saleable cash value of that home. As these sylvan things of beauty expand in their summer green, and autumn crimson and gold, they more and more become joys forever. Their beauty so wins its way to the better soul that slumbers in the son of wealth, as he passes by and looks on them, that he comes to long to possess them. But the poor old man who planted the trees, loves them too, and his price for his old home has many times more than the cost of those trees added to what the market value of the ground

would be, were the trees removed. The rich man gladly pays the price. This is at once his testimony and his cash tribute to the value of beauty. Can this be true in the material world without its being likewise a type of enhancement of tangible values in realms ethical?

He in whose heart garden trees are transplanted from the banks of a river that rolls in the land beyond the stars, has far reaching anchorages. Conscience becomes the magnet of his voyaging on the ocean of time, as he speeds on to that shoreless ocean beyond. Only in proportion as this is true of him, is he trustworthy. Exactly in proportion as he is trustworthy, is his secular service of value even to Midas, as he works with his muck rake among the things of time and sense. Whether he receives wages or pays them, conscience whispers, "This is the path laid down by the rule that is golden, and it leads to the green pastures and beside the still waters of peace and of true prosperity." As a patriot it reminds him that "Politics is that part of ethics which pertains to the public good," and he can never be led to flounder in the selfish quicksands of partisanship.

Such conscience has plus value that is immeasurable.

The lack of it is a power for evil which is equally immeasurable.

MAN'S INHERITANCE IN THE SABBATH.

[Contributed to the American Institute of Christian Philosophy.]

By Rev. Greenville Ross Pike, Fargo, Dakota.

FEW great questions are so vaguely comprehended, and yet so vitally associated with every man's truest interests, as this of the Sabbath. There is in most minds an uncertainty about the whole matter; a doubt as to what is its true *purpose*, what its true *value*, and what its ultimate *authority*.

Clearly enough, the subject is vast, intricate, complicated. It is an interminable labyrinth of principles, inferences, and applications, from which there is little hope of deliverance unless one can lay hold of some Ariadne's clue. The soft Syrian skies of Galilee once broke silence in a word of wondrous meaning: THE SABBATH WAS MADE FOR MAN. Is not this solid ground whereon each one may stand securely and take his bearings and, so far at least as it relates to himself, comprehend the whole?

This is not the form, perhaps, which most of us would have preferred that the interpretation should assume. That which comes in the shape of definite commands and specific injunctions is most easily applied. But this we already had in the fourth command from Sinai. More helpful finally, however, because universal and hence eternally applicable, is this statement of the underlying, basal principle and reason for the Sabbath's existence,—the Sabbath was made for man. This grounds the origin of the Sabbath upon God's pre-cognitive love for humanity. Its purpose is not to impose arbitrary restraint; not to hedge man about with ritualistic formulæ; not to hamper him with Puritanic requirements, but to enlarge and to liberate. It is a gift of divine benevolence, not an exercise of divine authority. It is a pre-mundane provision for man's welfare wrought into the structure of the universe, and hence it antedates not only Mosaic

legislation, but man's creation as well. It is a natural law, therefore, which cannot be broken without doing violence to man's own constitution. On the side of his body, man is a part of the material creation and subject to its limitations. The observance of the Sabbath is a natural necessity.

We find its law laid upon the molecules of inanimate matter. The experiments of Prof. Egleston, of the Columbia College School of Mines, as reported not long since to the American Institute of Mining Engineers at Montreal, show that the metals used in machinery undergo deterioration by use, and recuperate by rest. Even the iron and the steel of an engine, therefore, will last longer, proportionately, and do more work with seasons of periodic rest than when the strain is constant.* Whether in this case the best results demand a regular cessation from use every seventh day is probably a question that could be determined only by long and careful experiment. That the law of periodic rest is graven upon the very atoms of matter seems past dispute. It is amply demonstrated also that fields need occasionally to lie fallow in order to produce to their full capacity.

But this necessity of release from toil at stated intervals is still more imperative and more legibly written in the organization of the domestic animals by which man serves himself. The settling of the great West, to state a single instance of what has been often and abundantly proven, decided, among other things, that in the great fleets of "prairie schooners" which for half a century have been headed towards the setting sun, those reached their destination first who gave their patient oxen the benefit of Sabbath rest.

If, therefore, the advantage of stated relaxation runs increasingly through nature from its lowest to its highest ranges, man, by virtue of his identification with that creation of which he is the culmination, furnishes in his own body an unanswerable argument for scrupulously observing the Sabbath. Its weekly return is a gift of Heaven to the worker, to the weary, to lives dim and shadowed with toil. They whose hours are not bought in the market, and whom nothing more imperative than ambition,

* In CHRISTIAN THOUGHT for February, 1887, page 291, may be found a fuller development of this truth.

avarice, or emulation goads on to ceaseless exertion do not so sorely need this feature of the day. But the children of labor, misled, befogged, conscious of a wrong, but not clearly sensible what it is, or where it lies, strike blindly in the dark and stab their truest friend in striking at the Sabbath. With more than Esau's fatuity, they barter their priceless birthright of Sabbath time, this inheritance whose potential wealth passes their power of computation, for the poor mess of human pottage, in the shape of extra wages for Sunday work, opening of public buildings for Sunday visitation, running of extra trains for Sunday excursions, publishing special editions of newspapers for Sunday reading. Only by dire experience do they learn the value of the estate with which they have parted. The workingmen of other countries are beginning to realize what they have lost. Must the American laborer, most richly endowed of all the working brotherhood, also play the spendthrift part of the prodigal son before he realizes the value of the portion he is wasting? Will he not the rather be intelligent enough to profit by the experience of his old-world brethren?

The laboring classes all over Europe are finding that, in giving up their Sunday freedom, instead of trading a superfluous patrimony for richer benefits, they have really been relinquishing one of the necessaries of life, without adequate return. Consequently a great cry of the toiling multitude is going up, entreating that the precious boon with which they were endowed of Heaven, and which they have lightly thrown away, be given back to them. They are seeking now to acquire as a gift from the hands of human legislators what was originally theirs by irrevocable charter from their Creator, who *made* the Sabbath for man.

The socialistic movement in Germany makes one of its most distinct planks, and most strenuous demands, the enacting of laws forbidding Sunday work. So great has been the pressure, from conservatives and socialists combined, that even the strong-willed Chancellor, whose policy is to repress all socialistic agitation with an iron hand, was obliged to appoint a commission to inquire into the extent of the evil and the possibility of remedy. The result was that last year the Reichstag passed a measure

which provides, with somewhat large exceptions and limitations, that "Employers cannot compel their workingmen to labor on Sundays."

In England, so wide awake to the value of this day are those who need it most, that in 1882, while sixty-two trades unions and other workingmen's societies, representing only 45,482 members, voted in favor of the Sunday opening of museums and similar institutions, 2,412 societies, representing more than ten times as many, or 501,705 members, voted again such opening.

Equally significant, though given in a different way, is the testimony of the French laborer. All that distinguishes Sunday from other days in Paris is a brisker trade, a more feverish rush after amusements, a more rapid consumption of life's forces. But the inexorable requirement of periodic repose is not suspended. When man sets himself in persistent opposition to a law of nature it is *not the law* that is broken! The testimony of eye-witnesses is that "*there is no old stone mason, no old shoemaker, no old carpenter, no old printer, no old artisan in Paris.*" This constitutional law of rest lays hands upon its violater and cuts him off, untimely, that his abused body may "enjoy its Sabbaths . . . because it did not rest in his Sabbaths when he dwelt in the land."

In view of these primordial and irrevocable facts, written in man's blood and nerves and muscles, Pierre Proudhon, atheist and socialist, writes in the name of a verified need, and voices a growing opinion, in saying: "The laboring classes are too much interested in the maintenance of the Sunday vacation to allow it ever to perish. In the celebration of Sunday lies one of the most fruitful principles of our future progress. It is in *favor* of Sunday that our reform will operate." It is not possible to quote here, nor even to mention, the library of evidence accumulated by statesmen, jurists, political economists, social reformers, statisticians, physiologists, and hygienists, all working on different lines and approaching the subject often from opposite points of view, yet all reaching the same conclusion. This is less to be regretted, since every one who will may verify by his own observation the truth of the statement with which Neimeyer, Professor of Hygiene in the University of Leipsic, sums up the result

of his own careful investigations: "If religion calls the seventh day 'the day of the Lord,' the hygienist, for the reasons I have exhibited, will call Sunday 'the day of Man.'"

The Sabbath, then, is a priceless physical endowment that provides rest for the weary and renewal of life for them that are ready to die. It is man's most precious boon, a patrimony from the Father of Spirits. All men need it. Especially, however, does the high pressure of American life necessitate such a safety valve. The fast expresses, whose engineers are asking to be put on slow freight trains that they may recover their nervous balance, are an epitome of modern, and pre-eminently of American existence. The greater the rate of speed, the greater the proportional wear and tear of machinery, of wood and iron not only, but of life force and of nervous energy. Hence of all toilers, whether with hand or brain, the American has greatest need of the Sabbath's blessings.

Until comparatively recent years the traditions of the fathers and our legacy from them of a proper use of the day, have been sufficient to save for the worker in America his Sabbath inheritance largely unimpaired. Just because, however, he has not seen the results of its loss demonstrated before his eyes he is squandering his inheritance at a ruinously rapid pace. Carefully gathered statistics and estimates indicate that already for the bread-winner in every eighth family this first essential of health and reasonably long life has passed from his possession, and his foot is never off the treadmill of labor.

To these unfortunate ones, how ghastly must appear the fun in the double-page cartoon in a recent issue of one of New York's comic papers! "Uncle Sam," riding at headlong speed his mettlesome charger, "National Progress," whose saddle trappings are symbols of the country's activities and amusements, is made to say to the "Sabbatarian Obstructionists," who strive to prevent the carrying of these week-day burdens through the Sabbath also, "Get out of the way, boys! This here nation can't stop one day in seven to please anybody." It makes a striking picture. So would the representation of a crowded Cunarder whose passengers are busy shovelling the provisions overboard to make a children's play-ground of the store-rooms. But no less

striking would be the woful inadequacy rightly to direct public opinion exhibited by any journal that should charge the officers with bigotry in their attempts to stop such suicidal madness.

This pitiful misrepresentation is worthy of notice only because it presents in visible form a prevalent idea that somehow there is some advantage in adding Sunday's hours to workday time. Of all current delusions, this is the most baseless, having no better reason than the assumption that God has arbitrarily claimed one-seventh of mans day's and hence every moment smuggled to the human side of the account is clear profit. This endeavor to gain a point on the Omniscient—and Lowell's statement still holds true,

> "Ye'll hev to get up airly
> If ye want to take in God—"

loses sight of the fact that God does not need the day. He did not make the Sabbath for Himself. He made the Sabbath *for* MAN. It is his own time, provided for him by kindly foreknowledge of his Creator and *kept* for him by the same Almighty Providence despite the friction of ages, the collapse of empires, and the utmost endeavors of greed. Once let this truth be firmly grasped, and no miser's clutch upon his gold can equal ours upon the slightest fragment of these precious moments. Take them away, and when shall the shackles of toil fall from the weary muscles? What hand of healing will soothe the throbbing nerves, worn by continuous tension till every separate filament is a thread of fire? What chance will remain for the bowed form to straighten, and the knotted sinews to relax, if this God-appointed heritage of rest be despised and recklessly thrown away?

Standing on this monumental truth, the Sabbath was made for man, each one may try all proposed methods of observing it, and may judge whether those who would help him save, or help him spend it, are his truest friends; and may also see that, whether called work or play, whatever interferes with the grand function of this day as the stand-pipe from which the reservoirs of physical force and nervous energy, overdrawn during the week, are refilled, is not use of the Sabbath, but its abuse.

Will any one object that while fashioning man, God might have so fashioned him that he should run as a sort of perpetual

motion, independent of this necessity of periodic rest? The answer is, this very necessity is further evidence of the Divine love which dictated the making of the Sabbath. Man is more than a working machine. He is *a man*, and so long as he remains such he needs the Sabbath for manly use; it was made *for* him. But for this compulsion, though heir of all the future and of all the possibilities of an *immortal* spirit, he would have been utterly and ceaselessly absorbed in the supply of mortal needs and in ministering to bodily pleasures. Those

> "Beneath life's crushing load
> Whose forms are bending low,
> Who toil along the climbing way
> With painful steps and slow,"

would never heed when these

> "Glad and golden hours
> Come swiftly on the wing,"

nor

> "Rest beside the weary road
> And hear the angels sing."

But now the remembrance of these things is made sure by being written in the requirements of their physical constitution.

The Sabbath, therefore, is far more than a rest day, it is a great moral opportunity. "Sunday," says Ralph Waldo Emerson, "is the core of our civilization, dedicated to thought and reverence. It invites to the noblest solitude, the best society, the loftiest knowledge of truth and duty." On this day the fetters of labor fall off. The man stands erect. The smoke of work-a-day activity blows away, and through the vapor and mist of the week-day atmosphere the light of heaven shines. Consequently the squandering of this inheritance means far more than simply lack of needed release from labor, with resulting shortening of life and curtailing of power. The noblest faculties of the man become poverty-stricken, emaciate. Look at the man who grinds at the mill of secular business seven days of the week. You may not notice deterioration from day to day, not even from month to month. But after ten years, look at him, and after ten more, look again. You will see how, even while the animal waxes sleek and flourishes, the man within is starving. The

marrow of his soul has gone to lubricate the gearing of his secular machinery.

Hence the saving of a few working hours by beginning a journey on Sabbath eve, by posting the ledger while others are at church, by writing up the overflow of six days' business correspondence in the seventh day's quiet, by reading the Sunday paper, with its market reports, its sporting news, its society gossip, has this very serious objection, if no other, that all these things keep one's moral faculties steeped on that day also in the same stupefying miasma of secularism, for the very purpose of escaping which the day is set apart.

The duties and distractions of most men's ordinary occupations constitute an impenetrable wall about them. They are like workmen in a shaft, the more assiduously they labor the deeper they bury themselves. They cannot break out on either hand. To all these suffocating souls the Sabbath is an opening at the top, bringing air and light and relief from the deadly choke-damp.

Whatever else, then, may be fluctuating and unsettled, to one standing on the bed-rock of conviction that the Sabbath was made for man, this at least is evident, it is a rare chance for the higher nature to triumph over the lower, the possibility of a great moral uplift which no one who values his manhood can afford to disregard.

This priceless opportunity which the Sabbath brings needs but to be fairly apprehended in order to be jealously guarded. Let a government attempt to wrest from any class a recognized privilege of spiritual culture, such as the right of Bible reading, of singing hymns, of personal communion with God, of church going, of religious meditation, and how soon would the cry of oppression be raised, and how bitterly would this encroachment upon rights dearer than life be resisted! All this the Sabbath brings to every man, and most of them thoughtlessly throw it away.

But the day has still a farther reach and a richer value. This opportunity for moral growth is subservient to higher ends. It is the open gateway into a realm of great *spiritual privilege*. The record that God rested from His labor and, *therefore*, hallowed

the seventh day as a memorial is a significant statement which has not been allowed its proper weight in considering the Sabbath's claims. This rest of the Creative Energy is the outward sign of superiority to all limitation of time or occupation. It marks the efficacy of the power put forth, in that it *completes* the thing attempted, enabling Him to retire from actively working out His will. The Sabbath of God is a permanent cessation from creative labor, since that work *is done.*

This, then, is the higher significance and message of the Sabbath to man. It lifts him to a participation, for at least one day in seven now, and ultimately all the time, in God's serene elevation above the necessity of labor for the bread that perishes. The Hebrew economy held a prophetic hint of this. Its week of days, its week of weeks, its week of years, its week of week-years, in the sweep of their ever-widening and ascending circles, all pointed forward to the time when man, too, should be entirely free. Here again, from another point of view, it is evident that not God's command but God's character is the Sabbath's ultimate sanction.

One question yet remains. Entrusting the Sabbath thus to man as an inheritance to occupy, instead of as a ritual to observe; committing it to him in possession to waste, if he will, instead of making it inalienable as a command, will he not utterly abuse the confidence reposed in him and utterly squander the estate itself? Doubtless he will. But God's dealing with man in this particular is like His dealings in other particulars, as health, talents, life. This is the only educational method possible to a moral agent. In abusing his opportunity for a time, he learns to use it for all time. Like the Prodigal Son, he will not long be driven to want even the pitiful portion of swine's husks to which his folly has reduced him, without learning to prize as never before the plentiful bread of his Father's house.

Not ordinary man, however, not natural man, but disciplined, developed man, is the one to whom the Sabbath in reality is entrusted and who alone can use as not abusing it. Only as man approaches Christlikeness will he be fit, or able, to enter upon his Sabbatic inheritance absolutely. "*Wherefore, the Son of Man is Lord also of the Sabbath.*"

NO SUBSTITUTE FOR CHRISTIANITY.

By Rev. Dr. Rivers, Louisville, Ky.

THE Christian religion is a necessity. The human race can no more do without it than it can do without the light or heat of the sun.

Nothing is more certain than that man must have some object of pursuit. He has a destiny to accomplish. Hence the proper objects of human pursuit have been most earnestly inquired after by the wise and good in all ages. These objects may be numerous and yet there must be one ultimate to which all others are subordinate.

The only way by which we can determine this ultimate or supreme object is to make a careful comparison of the different objects which engage the attention of mortals and thus be able to draw a legitimate conclusion as to which is most worthy of man's nature and which will secure for him the highest destiny.

We propose then in this discussion to establish two points. First, some form of religion should be the chief aim of man. Second, Christianity is that form. If we can establish these two propositions then we answer every objection to Christianity, whether brought by Infidels or Mohammedans, by Buddhists or the followers of Confucius, or come from what source they may.

First: No pursuit can yield the satisfaction which religion can afford. Man is immortal. He is conscious of immortality. No sophistical method of reasoning can convince him to the contrary. His object of pursuit must meet, then, the immortality of his nature. Any object that does not reach that height is unworthy of supremacy and its supremacy is a degradation to man.

Second: Man is a moral being. The capacity for moral action is the great distinctive boundary between him and the lower animals. He is endowed with moral feeling as well as with a quickness of perception as to right and wrong. This

moral nature finds satisfaction alone in the pursuit of right. Wrong perverts, blights and ruins man. Everything must yield to right or the highest portion of man's nature is allowed to lie neglected, or is, indeed, eradicated. With moral sensibilities blunted and the high impulses to virtue repressed, man is either an aimless being controlled by every wind and tide, or pursuing some *ignis fatuus*, he leaves forever the true light which is designed to lighten every man that cometh into the world. This moral nature is of so high a mould that it can be satisfied with nothing less than God. It reaches its end in right and in right alone. The pursuit of anything less than the eternal right, is utterly unworthy of man as a moral being and less than this eternal principle can not satisfy its imperative demands.

Man is a religious being and he must not only have right as the object of his pursuit, but he must be able to worship Him from whom he derived his own wonderful nature. Even when found steeped in ignorance, human beings must have some object of adoration, some one upon whom to concentrate the fervor of religious devotion.

Taking then these great principles as true we are prepared to show that nothing can take the place of our holy religion.

First, let us take the most common pursuit and compare it with the religion of Christ. Most men seek wealth and make it the supreme object. Is it worthy? Does it satisfy the wants of the soul? It is needless to deny the value of wealth. We are indebted to its proper application for much that is valuable in our civilization. By it we have increased the fertility of the soil and added to the products of human labor. It has built and furnished the palaces which are the ornaments of our land and the abodes of the intelligent and refined. United with energy it has penetrated the wilderness and converted it into smiling fields and crowded villages. It has sent the whistle of the engine and the clatter of the train across the continent. It has built up colleges, promoted literature and advanced science. It has sent out missionaries and offered the Gospel of peace to the benighted heathen and yet it is unsatisfying. The material cannot satisfy the spiritual. Go ask the Goulds, Astors and Vanderbilts if wealth satisfies and the universal response is

"No." The soul is too ethereal and its aspirations too high to be satisfied with all the treasures which enterprise ever sought or labor ever earned. So it is with honor. The breath of applause dies away upon the heart sickened with adulation. The trump of fame loses all its charms amid the cares of state, the carnage of war, the pains of sickness or the infirmities of age. "Uneasy lies the head that wears a crown." Poor is the satisfaction which the applause of an excited populace can give. Man wants a firm foundation on which to build. He wants a something stable on which to place his feet. But he that builds his happiness on human glory is as destitute of a resting place as was Noah's dove when the world was a waste of waters, and neither rock nor tree was above the surface. He is infinitely worse off than the man that built his house upon the sand. He rests his happiness upon a foundation more attenuated than the atmosphere and lighter than hydrogen.

Science itself, grand as it is, is not sufficient to meet the demands of the complex man. It may satisfy reason and may gratify the desire for knowledge. But it is not capable of meeting the demands of man's moral nature. Science is cold. It touches not the feelings. It awakens thought and arouses genius but it has no power to meet the conscience or to soften the heart. Its grandest discoveries, its most wonderful demonstrations often leave the heart cold and the conscience untouched. And yet we would not utter a word against science. It is from God. It has its mission, and it is a great one. It adds to the sum of knowledge. It lessens human suffering. It illustrates the character of God. It establishes old truths and develops new ones. It presents to us the human mind grappling with truth, seizing it with avidity and holding it firmly in its grasp. As the eagle seizes upon its prey and triumphantly bears it off in its talons, so does the scientific mind seize upon truth wherever found and hold to it with a tenacity which death itself may not loose. We would not lessen the zeal of the devotee of science. And yet we would lead him higher. From truth to the God of truth, from science to religion, from the true to the good, the transition need not be difficult, and yet it must be made. This little Rubicon must e

crossed. We must pass into the domain of religion ere we can be happy.

We have presented the three highest and noblest pursuits of man and have shown that they meet not the demands which the soul makes. This establishes the first proposition that some form of religion is demanded to meet the wants of man.

We come now to our second proposition. No religion can be substituted for the religion of Christ.

You may try Paganism, if you will. Paganism, in the lowest forms, is too disgusting and absurd to be mentioned in this connection. The loathsome rites of Voudooism and Feticism are at once denounced by the infidels and by the Christians. But let us take Paganism in its most enlightened form and as it expresses itself in Hindoo philosophy. In none of the Hindoo systems, says Mahan, is there the remotest recognition of the doctrine of a personal God, of God as possessed of moral perfections or as exercising in any proper sense a moral government over a realm of moral agents. The doctrine of God is either denied, ignored or recognized but in the pantheistic sense. Nor has morality in its true and Christian form any place in any Hindoo system—morality in the form of love to God and good will and benevolent activity toward man. (Mahan's "History of Philosophy," pp. 112, 113.)

The statement of these facts settles conclusively that the most refined system of Hindoo philosophy is unworthy of a comparison with Christianity. Confucius was a great moral teacher; at once simple and earnest. But his system utterly failed to teach his people even an imperfect knowledge of the only true God. The idolatrous temples and sacrifices established in his land at once show the inferiority of his system to the Theism of the Bible and to the worship of the only true God as taught by Christianity.

Let us try the philosophy of the Greeks: Take Stoicism. It eradicates all the tender sympathies. It turns the heart to stone. Indifference to suffering was the great central doctrine of the Porch. It took its votaries into a desert where no flowers bloomed and where all was death and gloom. Hard, jagged rocks, barren sands, and brazen skies are unrelieved by any rich

verdure, fleecy clouds, spicy breezes and flowing streams. It refused to allow the lovers of virtue to indulge in human sympathies. The divine in man was the coldness of indifference which nothing could melt. It was a stony hardness which nothing could soften. To be joyful or sad, to laugh or weep was alike unworthy of virtue and of its inflexible features. Stern and exacting, its doctrines left man a mere statue of bronze to be admired for symmetry but as incapable of joy as of suffering. Surely a system however virtuous, but cold and hard as granite, could not take the place of the congenial, sympathetic and benevolent religion of Christ. The exact opposite of this system was the Epicurean. It said to its votaries, "Gratify the passions, live for pleasure, pleasure is the main object of human existence." While Stoicism denied everything even virtuous emotion, Epicureanism denied nothing. It took its votaries to the gardens of pleasure where the ears were saluted with voluptuous strains of music. Eat and drink, it said, for to-morrow you may die. The feast, the dance, the laugh, the ribald jest, the merry song, these, all these were the heritage of the disciples of Epicurus. Rejoice in indulgence, visit the saloon. Quaff the poisoning goblet. On with the dance. Sip nectar from the cup of intoxication. Chase fleeting pleasures on flying feet. Let joy be unconfined. While Zeno eradicated human passions and appetites, Epicurus enthroned them. Such was Paganism. Such is man without God; running to extremes; either presenting us with human nature as but little above the beasts that perish, or exhibiting it so perverted and with as little of real humanity as belongs to a cast-iron man.

Platonism was really the most refined form of Pagan philosophy. It was too high for the multitude. Its distinctions were so metaphysical and its reasoning so profound that the common people could neither appreciate nor comprehend it. It lacked adaptation. It wanted simplicity. And besides it was without authority. Its utterances claimed no divine original. Its doctrines were uninspired. They originated with an anxious mind following the dim light of nature. They admitted a plurality of gods. They presented no credentials and were powerless to save.

The religion of the false Prophet, abounding as it does in inconsistencies, and with its gross licentious tendencies, could never be offered by any reasonable man as a substitute for the pure, consistent and truthful system of Christ. Then we are forced to take the religion of the Bible with its inspiring hopes, its spotless purity, its incorruptible morality, and its Divine Author, or we must embrace infidelity. This is the naked question that presents itself to us. Infidelity is rushing all of its votaries into Atheism. To be consistent they all must land there. Step by step, on and on, from one degree to another till with Darwin and Huxley they announce creation a myth, man a development from the lowest form of being, immortality a dream and God Himself with no throne and no government, no providence, no being. Take the two systems as intellectual and Christianity has the advantage. Reason is not ignored. Logic is not denied and true science is not dishonored by our holy religion. It underlies our literature, inspires our poetry and is the bulwark of science. This day, deprive the world of all that is Christian in letters, in morals, in civilization and we return to the age of barbarism and fall again to worshipping the creatures of superstition or of depravity. As a system of intellect, of thought, of enlightened reason, Christianity has nothing to fear. Its intellectual lustre is as bright as the sun in Heaven. The glory of its letters embellishes every page of modern literature. The sublimity of its truths is sufficient to fill with shame the infidel, who declares it to be a system based on ignorance and fostered by superstition. We rise from man to angels and from angels to God. We admire botany which reveals to us the mysteries of the vegetable world and which classifies all plants, from the hyssop that springs from the wall and the moss that grows upon the rock to the cedar that towers over Lebanon. We admire geology which penetrates the crust of the earth and goes down through its different strata from the top of the highest mountain, until it reaches that ocean of central fires which beneath a roof and within walls of granite, dashes its waves of flame and hurls its billows against the impregnable doors that God has locked. We admire astronomy which exhibits the wonderful harmonies of nature, the laws of

the universe, the revolutions of planets and the composition of that wonderful orb which moving with indescribable rapidity carries with it, in its gallop through space, the system of worlds by which he is surrounded. We admire medicine and chemistry and indeed every science, moral or natural, because they have helped to crystallize society, to form states, to lessen suffering, to mitigate poverty, to increase the productiveness of toil, to add to the sum of human happiness and to prolong human existence. But really and truly there is no science like the science of salvation. No philosophy so deep, no truth so grand. It goes deeper than the foundations and higher than the flights of planets. It ascends through revolving worlds and mysterious laws and uncreated light until it leads its votary into the presence of God and leaves him an humble worshipper at the throne of the Eternal Triad. Of all truths this is the grandest. Of all science this is the truest. God, the eternal, invisible, immaculate God. Let Jupiter and Moloch, stars and suns, stocks and stones, devils and heroes all disappear amid the celestial glory that encircles Jehovah. He is our God. Enthroned in light, omnipotent in power, infinite in wisdom, He is at once the most august and glorious being in the universe, the highest conception of the human mind and the grandest revelation of the divine.

Lastly, it has no substitute as a system of gracious hopes and holy joys. Its promises inspire hope and their fulfilment gives consolation. It supports the weak and comforts the feeble-minded. It is joy to the sorrowing and life to the dead. It is pardon to the guilty and salvation to the lost. It fills the church with lively members and it peoples Heaven with happy saints. Its hopes are undying and its joys are immortal. As a system of truth it shines like the sun and all other systems fade away before it. As a system of morals it stands like a tower amid crumbling ruins, itself still strong and its deep foundations unmoved. As a system of hopes and joys it opens its portals to all its votaries and presents them with happiness eternal.

VIEWS AND REVIEWS.

CREATION.—How to begin to write a Bible must have been a question of great difficulty. The beginning, which is given in the first chapter of Genesis, commends itself as peculiarly sublime. Regard it as you please, as literal, historical, parabolical, it is unquestionably marked by adequate energy and magnificence of style. Judging from the method of the writer, I should at once say, the aim of this man is not to tell with scientific precision the natural history of Creation; he has some other undeclared purpose in view. He finds that he must say something about the house, before he says anything about the tenant; but he feels that this something must be the least possible. Hence, we have this rugged but majestic account.

In reading this chapter we must receive several memorable impressions:

1. *This account of Creation is deeply religious;* and from this fact I infer that the whole book, of which it is the opening chapter, is intended to be a religious and not a scientific revelation. If a natural philosopher had undertaken to write an account of the earth he would have begun in a totally different tone, and he would have been justified in so doing. A work on geography that began with a psalm or a prayer would be considered as going out of its proper sphere. The object of Moses is simply and absolutely religious. We do not say that a man is an atheist because he writes upon geology without announcing a religious creed. So we ought not to say that a man is an ignoramus because he writes a religious bock without any pretence to scientific learning. This man is resolved on reading all things on the God-side; he will begin at the fountain, not at the stream; and in claiming to do this he is evidently exercising a legitimate discretion, and he may justify its exercise by the result which he secures.

Our life may be read from an outside point of view, and, therefore, we are glad to hear the testimony of the anatomist,

the physiologist, and the physician; they have a right to speak, and they have a right to be heard. Our life may also be read from an internal point of view, and, therefore, we are glad to hear the psychologist, the metaphysician, and the theologian. Let us listen to them all. We may need all the help they can jointly give us.

Now, Moses says, "I am going to write the history of Creation as a theologian; I deliberately and distinctly assume a theological position, and my meaning you may catch from my first tone: 'In the beginning God created the heavens and the earth.'" How he will conduct the discussion, we cannot at this moment tell. He may have made a mistake in supposing that it can be conducted from this point at all. But in common fairness give him time.

It does not follow that because another writer proposes to give the history of Creation without any reference to God, that, therefore, he will inevitably and completely succeed. Even an atheist may sometimes be wrong. Instead, therefore, of stumbling at this first chapter of Genesis, I read it as the writer meant it to be read; and I reserve the right of critical revision after I have fully mastered what he has really written. From the intensity of his religious tone, I infer that this man is going to tell me in the simplest and directest manner all he can tell about Creation, or all he thinks it needful to tell in order to get sufficient background for the story which it is his main purpose to relate.

He does not lay claim to any consideration which I need hesitate to yield. He does not say, "I am inspired; what I say is said with divine and final authority, and you must accept it or be lost in utter darkness." He says nothing about inspiration. He does not lay claim to one title of authority. In a plain, abrupt, urgent manner he begins his stupendous task. I am charmed with his directness. I feel that if the story had to be told at all, it is begun in the best possible manner. If the writer had beaten about in laborious and literary circumlocution I should have suspected him; he would have been merely a smart artist in the use of words; but he begins at once as with a creative fiat, the tone being worthy of the brilliant occasion.

2. *The account of Creation evidently admits of much elucidation and expansion.* This it has unquestionably received. Moses does not say, "I have told you everything, and if any man shall ever arise to make a note or comment upon my words he is to be regarded as a liar." Certainly not. He gives rather a rough outline which is to be filled up as life advances. He says in effect, "This is the text, now let the commentators come with their notes." The geologist has come and he says—"read this word 'beginning' as if it referred to incalculable time," and there is no reason why his suggestion should not be adopted. In the next place he says,—"read the word 'day' as if it meant a great number of ages"; very good, we read it exactly so, and it does us no harm. Then other men of science arise and say, "Don't suppose that the heavens and the earth were made exactly as you see them; they came out of a germ, an atom, a molecule," and I answer, so be it. God did not make that tottering old man exactly as we see him; He did not make the trees and flowers exactly as we see them; and if it is the same with the heavens and the earth, be it so. "They came partly by friction," says another scientist. Very good, I reply, what is friction and who made it? "Rotation had something to do with it," shouts another learned man. Possibly so, I answer. What is rotation and who started it? "Origin of species," whispers another. Very good, again I answer. What is origin and when did it originate? Instead of resenting these suggestions I am thankful for them. I put them altogether and I find the difference between Moses and his scientific commentators to be that Moses worked synthetically and they worked analytically,—that is, Moses put all things together and the sum total was God; his commentators take all things to pieces and the sum total is a circumference without a centre. It is uncertain whether geologists contradict Moses, but it is positively certain beyond all doubt that geologists contradict one another.

This first chapter of Genesis is like an acorn, for out of it have come great forests of literature; it must have some pith in it, and sap and force, for verily its fertility is nothing less than a miracle.

3. *There is a special grandeur which is here given of the origin*

of Man. In the 26th verse the tone quite changes. Even the imperative mood softens somewhat, as if in an infinitely subtle way, man's own consent had been sought to his own creation. "Let us make man."—"make," as if little by little, a long process in course of which man becomes a party to his own making! Nor is this suggestion so wide of the mark as might at first appear. Is man not even now in process of being made? Must not all the members of the "US" work upon him in order to complete him, and give him the last touch of imperishable beauty? The Father has shaped him, the Son has redeemed him, the Spirit is now regenerating and sanctifying him, manifold mysteries are now working upon him, to the end that he may "come to a PERFECT MAN, unto the measure and the stature of Christ." As it were, arbitrarily and sovereignly, the dust was shaped into human form, an upright thing that had wonderful powers, and still more wonderful latent possibilities. But is not all biblical history an appeal to this upright thing to be a man? Is not the Gospel of Christ the good news that he may have life, yea life eternal and enter upon a destiny of immeasurable progress and ineffable felicity? What, I ask again, if he is still in process of being made? What if our present selves have to be shed as blossoms to make way for the fruit? We may be but a stratum on which other strata have to lie until the last line is laid down, and God's ideal of humanity is realized.

Or take it in the other or pleasanter way, which all Scripture would seem to sanction, namely, man was made a living soul—that is, every man was intended to live, and has capacities which enable him to receive life in its largest and divinest sense. But he can destroy himself. He can choose death rather than life. Now it is in this very choice that man is really "made." "I am come that ye might have life."

This glorious doctrine simplifies and glorifies human history as related in the Bible. Life and death are not set before beasts. Man can live, he was meant to live, he is besought to live, the whole scheme of redemption and providence is arranged to help him to live.—*Joseph Parker, D.D.*

VIRCHOW ON DARWIN.—Some sensation has been caused at

the recent Anthropological Congress in Vienna by the speech of the great Berlin biologist, Prof. Virchow. About a year ago Virchow, on a similar occasion, made a severe attack on the Darwinian position, and this year he is similarly outspoken. We make the following extracts from his long address to the Congress:

"Twenty years ago when we met at Innspruck, it was precisely the moment when the Darwinian theory had made its first victorious mark throughout the world. My friend Vogt at once rushed into the ranks of the champions of this doctrine. We have since in vain sought for the intermediate stages, which were supposed to connect man with the apes; the proto-man, the *pro-anthropos*, is not yet discovered. For anthropological science the *pro-anthropos* is not even a subject of discussion. The anthropologist may, perhaps, see him in a dream, but as soon as he awakes he cannot say that he has made any approach toward him. At that time in Innspruck the prospect was, apparently, that the course of descent from ape to man would be reconstructed all at once; but now we cannot even prove the descent of the separate races from one another. At this moment we are able to say that among the peoples of antiquity no single one was any nearer to the apes than we are. At this moment I can affirm that there is not upon earth any absolutely unknown race of men. The least known of all are the peoples of the central mountainous districts of the Malay Peninsula, but otherwise we know the people of Terra del Fuego quite as well as the Eskimo, Bashkirs, Polynesians, and Lapps. Nay, we know more of many of these races than we do of certain European tribes; I need only mention the Albanians. Every living race is still human; no single one has yet been found that we can designate as simian or quasi-simian. Even when in certain ones phenomena appear which are characteristic of the apes—*e.g.*, the peculiar ape-like projections of the skull in certain races—still we cannot on that account alone say that these men are ape-like. As regards the lake dwellings, I have been able to submit to comparative examination nearly every single skull that has been found. The result has been that we have certainly met with opposite characteristics among various races; but of all

these there is not one that lies outside of the boundaries of our present population. It can thus be positively demonstrated that in the course of 5,000 years no change of type worthy of mention has taken place. If you ask me whether the first man were white or black I can only say I don't know."

Prof. Virchow summed up the question as to what anthropological science during the last forty years has gained, and whether, as many contend, it has gone forward or backward. "Twenty years ago the leaders of our science asserted that they knew many things which, as a matter of fact they did not know. Nowadays we know what we know. I can only reckon up our account in so far as to say that we have made no debts; that is, we have made no loan from hypotheses: we are in no danger of seeing that which we know overturned in the course of the next moment. We have levelled the ground, so that the coming generation may make abundant use of the material at their disposition. As an obtainable objective of the next twenty years, we must look to the anthropology of the European nationalities."

A NOTICE TO COLLEGES.—In the hands of the President of the Institute have been placed $500 to expend in sending sets of CHRISTIAN THOUGHT, six volumes, to such institutions of learning as shall request that their libraries may receive them. The only terms of the donor are that the colleges, or other institutions, shall *request* the donation and be willing to pay the expressage. He believes that there will be no use in placing books at the disposal of those who do not comply with such easy terms of procuring a most valuable addition to their libraries. Already complete sets have been sent to Dartmouth, Hamilton, Maryville, Middlebury, St. Stephen's, and General Theological Seminary in City of New York. As the money will procure only about fifty sets those will be served first who first apply. Address the application to Mr. Charles M. Davis, Secretary, 4 Winthrop Place, New York.

SUMMER SCHOOL OF 1889.

By the Secretary.

THE Thirteenth Summer School of Christian Philosophy was held in the auditorium of the Seaside Assembly Grounds at Key East, New Jersey, from Thursday, July 18, to Friday, July 26, 1889, the President, Charles F. Deems, D.D., LL.D., presiding.

The first session was held on Thursday, July 18, at 11 A.M., when the devotional exercises were conducted by the President. Dr. C. R. Blackall, General Conductor of the Seaside Assembly, in a cordial address welcomed the Institute to the Assembly's grounds and hospitalities. The President replied in appropriate terms, and then explained the objects, principles and needs of the Institute. The regular paper of the day was by the Rt. Rev. Samuel Fallows, D.D., of Chicago, whose subject was "Christian Pantheism." Immediately after the reading, the paper and subject were discussed by Rev. Drs. John C. Clyde, of Bloomsbury, N. J., Horace C. Hovey, of Bridgeport, Ct., A. I. Rowland, of Baltimore, Md., George Sexton, of Dunkirk, N. Y., Profs. E. H. Johnson, of Crozier Theological Seminary; Prof. Charles F. Himes, of Dickinson College; and the President.

On Friday morning, July 19, Scripture was read and prayer offered by Rev. Dr. Wilbur F. Paddock, rector of St. Andrew's, Philadelphia.

The regular paper of the day was by George Sexton, M.D., D.D., LL.D., of Dunkirk, N. Y., whose subject was "The Folly of Atheism Intensified by Modern Discovery."

The discussion was conducted by Drs. E. S. Stafford, of Toronto, Canada, and E. O. Hovey, of New Haven, Wilbur F. Watkins, of Philadelphia, and Horace C. Hovey, of Bridgeport, Ct., Rev. David G. Wylie, of New York, and the President.

At the third session, Saturday, July 20, the devotional exercises were led by Prof. S. L. Bowman, D.D., S.T.D., of De Pauw University, Ind.

Before the lecture a business meeting of the members of the Institute was held, at which the President appointed the following Committees:

To audit the Treasurer's and Secretary's accounts, Dr. A. L. Turner, and Mr. Joseph A. Hallock.

To nominate officers at the annual meeting to be held on the 24th inst., Rev. Drs. Alex. Mackay-Smith, Wilbur F. Watkins, John C. Clyde, Prof. Charles F. Himes, and Austin Abbott, Esq.

The President announced that Dr. Magill, President of Swarthmore College, Pa., since his engagement to lecture before the Institute had been compelled, on account of the state of his health, to resign his presidency and withdraw from all intellectual work. Amory H. Bradford, D.D., of Montclair, N. J., had consented to take Dr. Magill's place, and now read a paper entitled, "The Ministry of Culture."

The paper and subject were discussed by Drs. Sexton and Clyde and the President.

On Sunday, July 21, the annual sermon was preached by Archdeacon Alex. Mackay-Smith, D.D., S.T.D., of the Diocese of New York, from the text, "We Walk by Faith not by Sight."

Monday, July 22, Scripture was read and prayer offered by Scott F. Hershey, D.D., of Washington, D. C. The regular paper of the morning was by E. A. Stafford, D.D., of Toronto, Canada, whose subject was, "The Service of Free Thought to Christianity." This was discussed by Rev. Drs. Hershey, Clyde and Waters, Prof. D. Batchellor, and the President.

In the evening the devotional exercises were conducted by Pres. Samuel W. Boardman, D.D., of Maryville College, Tenn. The regular paper of the evening was by Miss Jane M. Bancroft, Ph.D., of New York, whose subject was "Woman's Work in the Modern Church." Rev. Drs. Hovey and Marshall, Dr. Blackall and the President discussed the paper and the subject.

On motion of Dr. Blackall, seconded by Dr. Turner, it was

Resolved, That the thanks of the Institute are especially due and are hereby tendered to Jane M. Bancroft, Ph.D., for calling our attention so earnestly and impressively, to the work which women are doing in the modern Church.

Tuesday, July 23, 1889, after devotional exercises by Rev. Dr. Marshall, of Vicksburg, Miss., Hon. Wm. C. P. Breckenridge, of Kentucky, addressed the Institute on "The Politics of Christianity." Rev. Drs. Marshall and Rankin, and Rev. James F. Riggs, of Bergen Point, N. J., took part in the discussion which followed.

Annual Meeting.

The Annual Meeting of the Institute was held in the auditorium on Wednesday, July 21, 1889, at 11 A.M., with the President in the chair. Scripture was read and prayer offered by President Robert B. Fairbairn, D.D., LL.D., of St. Stephen's College, New York.

Dr. A. L. Turner, of the Auditing Committee, reported that the committee had audited the accounts of the Treasurer and of the Secretary, had found them correct, and had so entered it over their signature on the account book of the Institute. The report is as follows:

Disbursements.

Balance due Treasury, July 1, 1888,	$ 51 65
Paid for Summer Schools of 1888,	579 47
" Postage,	74 60
" Stationery and Printing,	87 95
" Monthly Meetings,	124 35
" Clerical Services,	486 97
Christian Thought for Members, and Donations,	1,137 25
	$2,542 24

Receipts.

From Donations for Summer Schools,	$645 00
" " " Christian Thought,	20 00
" " " Current Expenses,	10 00
" Life Membership,	50 00
" Annual Fees,	1,713 00
" Balance due Treasurer,	104 24
	2,542 24

The Committee on Nominations, through their Chairman, Wilbur F. Watkins, D.D., of Philadelphia, made their report which was accepted, and the following officers were elected for the ensuing year:

President, Charles F. Deems, D.D., LL.D. *Vice-Presidents*, California, Rev. F. M. Dimmick; Connecticut, Noah Porter,

D.D., LL.D.; District Columbia, Rev. Bishop J. F. Hurst, D.D., LL.D.; Delaware, Hon. Thomas F. Bayard; Florida, E. Warren Clark, D.D.; Georgia, Isaac S. Hopkins, D.D., Ph.D.; Illinois, Rev. Bishop Samuel M. Fallows, LL.D.; Iowa, Thomas E. Fleming, D.D.; Kentucky, Hon. W. C. P. Breckenridge, M. C.; Massachusetts, Rev. Joseph Cook; Maine, Thomas Hill, D.D., LL.D.; Maryland, Edward J. Drinkhouse, M.D., D.D.; Michigan, Peter Stryker, D.D.; Mississippi, Rt. Rev. Hugh Miller Thompson, LL.D.; Missouri, Rev. Bishop Eugene R. Hendrix, D.D.; New Brunswick (Can.), James R. Inch, LL.D.; North Carolina, Hon. Kemp P. Battle, LL.D.; New Hampshire, Rev. Henry E. Cooke; New Jersey, President Francis L. Patton, D.D., LL.D.; Nova Scotia (Can.), Rev. Wm. Ainley; New York, Ransom B. Welch, D.D., LL.D.; Ohio, Rt. Rev. Gregory T. Bedell, D.D.; Ontario (Can.), Rev. Donald G. Sutherland, A.M.; Pennsylvania, Wm. C. Cattell, D.D., LL.D.; South Carolina, Gilbert R. Brackett, D.D.; Tennessee, James A. Orman, D.D.; Texas, Robert. L. Dabney, LL.D.; Virginia, Prof. Francis H. Smith, LL.D. *Trustees*, Mr. Robert L. Crawford, General Clinton B. Fiske, Mr. John H. Osborne, Mr. Cornelius Vanderbilt, Mr. Marion J. Verdery. *Secretary*, Mr. Charles M. Davis. *Treasurer*, Mr. Wm. Harman Brown.

The Secretary in presenting his report called attention to the financial condition of the Institute. The Treasurer of the Endowment Fund holds securities amounting to $2,150. A promise has been made of $5,000, provided $15,000 more can be pledged before January 1, 1890. It is hoped that the Institute will by that time be established on a permanent financial basis.

There has been expended in supplying CHRISTIAN THOUGHT to the members and in donating it to educational institutions in this and other lands, $1,137.25. The cost of Summer Schools and monthly meetings has been $703.82. All other expenses of the Institute, including stationery, printing, postage, travelling expenses and clerical services, amounted to $649.52. Nothing has been spent for rent, fuel or light, as rooms, office and other conveniences have been furnished free of expense by the Trustees of the Church of the Strangers, in New York.

The receipts from all sources were $2,438. There is a bal-

ance due the Treasurer of $104.24, besides a debt of $300 due the President for money advanced to supply the members with CHRISTIAN THOUGHT. If the members whose annual fees, due a year ago (in some cases longer), realized the trouble and anxiety which their forgetfulness causes the officers, we feel confident that there would always be a balance in the treasury, and all bills paid.

SUMMER SCHOOLS.

Two Summer Schools were held last year, one at Round Lake, New York, the other at Key East, New Jersey; at each of which five lectures were delivered. Nine monthly meetings have been held at the rooms of the Institute in New York, at each of which a paper has been read. All these lectures and papers have been published in CHRISTIAN THOUGHT and sent to the members of the Institute.

The nucleus of the Library which has been slowly growing has lately received an addition of one hundred volumes, being the philosophical library of the President which he has given to the Institute during the year just closed. The Victoria Society of Great Britain exchanges publications with the American Institute; the published Transactions of the former now on our shelves, amount to twenty-three volumes of rare and valuable literature. Members of the Institute also have occasionally contributed volumes of their own authorship. We should be glad to receive many more from friends of the Institute.

The number of members remains about the same as it was last year. There has been a goodly number of additions, but resignation and death have taken an equal number from our roll.

There are at present:

Endowment Members,	11
Life,	46
Annual,	426
Total,	483

OBITUARY.

The Institute cherishes the memory of the following members who have passed away during the year:

Vice-Pres. Bishop Holland N. McTyeire, D.D., Tenn.; Vice-

Pres. Rt. Rev. Samuel S. Harris, D.D., LL.D., Mich.; Theodore D. Woolsey, D.D., LL.D., New Haven; Samuel B. Chittenden, Brooklyn, N. Y.; Rt. Rev. Wm. M. Green, D.D., Tenn.; Isaac Errett, D.D., Cincinnati, Ohio; James P. Wilson, D.D., Newark, N. J.; Mrs. S. M. Proudfit, New York; John Elliott, Esq., New York.

The President's address, giving an account of the origin, history, principles and objects of the Institute, and of the work already accomplished by it, was listened to with close attention.

At its close, appropriate remarks were made by gentlemen from various parts of the United States and Canada, expressing their earnest conviction of the importance of the work done by the Institute, and pledging their hearty co-operation in the future. Among the speakers were Rev. Scott F. Hershey, Ph.D., of Washington, D. C.; Samuel W. Boardman, D.D., President of Maryville College, Tenn.; Robert B. Fairbairn, D.D., LL.D., President St. Stephen's College, N. Y.; Wilbur F. Watkins, D.D., Philadelphia; Rev. James F. Riggs, of Bergen Point, N. J., and Rev. Aaron Lloyd, of Belleville, N. J.

After adjournment the whole company went to the new Hall of Philosophy, recently erected by the Seaside Assembly, which, in appropriate remarks by A. L. Turner, M.D., was tendered to the Institute for its use whenever Schools of Philosophy should be held at Key East. Rev. Dr. Deems responded, closing the pleasant exercises with prayer and benediction.

On Wednesday evening the devotional exercises were led by Rev. Dr. J. E. Rankin, of Orange Valley, N. J.

The symposium consisted of contributions in answer to the question, "Is there any other science than physical science? If so, what, and why?"

Rev. James F. Riggs, of Bergen Point, N. J., read a paper by Prof. Noah K. Davis, of the University of Virginia; President S. W. Boardman, of Maryville College, read a contribution by Prof. Willis J. Beecher, of Auburn, N. Y.; Rev. Joseph Cook's paper was read by Dr. E. S. Stafford, of Toronto, Can., and Prof. Batchellor, of Philadelphia, read a contribution from Prof. Francis H. Smith, of the University of Virginia.

President Deems read a letter on the same subject by Prof. Simon Newcomb.

One was also contributed by Sir J. W. Dawson, of Canada.

The discussion was continued by Prof. Himes and Rev. Drs. Rankin, Fairbairn, and Boardman.

The ninth session of the school was held Thursday morning, at which Scripture was read and prayer offered by Prof. Aikin, of Princeton, N. J. The paper of the day was by Austin Abbott, Esq., of New York, on "The Uses of Retaliation in the Mosaic Law." Col. W. C. P. Breckenridge, Profs. Aikin and Staffor d Rev. Drs. Clyde and Rankin, and the President discussed the paper and subject.

In the evening the devotional exercises were conducted by Prof. Stafford, of Toronto. Rev. Dr. J. E. Rankin treated of "Men of Literary Genius and Christianity."

The eleventh and closing session of the school was held on Friday morning, when John C. Clyde, D.D., led the devotional exercises. Prof. Charles F. Himes, of Dickinson College, Carlisle, Pa., read a paper on "Creeds and Scientific Theories." Prof. George Macloskie, of Princeton, discussed the subject and paper.

The time having now arrived for closing the school, the President expressed his great pleasure in its success, and the broad and liberal spirit shown in the discussion of the various subjects presented. He also, in the name of the Institute, thanked the Seaside Assembly for the hospitality and courtesy so constantly shown to the school and its members. Conductor C. R. Blackall responded for the Assembly, and expressed the anticipation of welcoming the Institute to its new building next year.

After the singing of Dr. Rankin's hymn, "*God be with you till we meet again*," the President pronounced the benediction and declared the Thirteenth Summer School of the Institute closed.

ABOUT BOOKS.

[In this department we shall make mention of recent publications, especially those in the line of our studies. There will not be space for extended review. The name of the book, its publisher, and its price when known, together with a brief statement of its drift will probably meet the demands of our readers. Any book mentioned will be sent post-paid, on receipt of price, by WILBUR B. KETCHAM, 71 Bible House, New York.]

"PASSING THROUGH THE GATES, AND OTHER SERMONS," is the title of a volume of the discourses of the late Bishop McTyeire, of the Southern Methodist Episcopal Church. It is edited, with an introduction, by Prof. Tigert. The Bishop was, in no sense, a popular preacher. He was seldom emotional; his discourses were addressed to the intellect. They were never prepared for the press, except in the cases where occasional sermons were reported. A number of those appear in this volume. He preached on the occasion of the death of his colleagues, Bishop Soule, Cavanaugh, Marvin and Doggett. This volume also has a sermon on Cornelius Vanderbilt, and one on Dr. John B. McFerren. These memorial discourses will be very valuable, as historical material, and those who knew the subjects, as the writer of this notice did, must be impressed with Bishop McTyeire's great ability to analyze character. The introduction is very able and instructive. It does the Bishop simple justice, and increases the admiration which all who knew the great man must entertain for him.

The work of women in the Church of Christ is attracting fresh and deep interest, as is evidenced in the able paper of Miss Bancroft, which appears in this number. Since the delivery of that paper, Miss Bancroft's book, entitled, "DEACONESSES IN EUROPE AND THEIR LESSONS FOR AMERICA," has been published (N. Y., Hunt & Eaton). We predict this will become the standard book in its department. The author has considered the Diaconate in the Christian Church and woman's relations to that office, from the days of the early Church to this decade in the nineteenth century. She has had unusual facility in getting at original sources of information, and she has used them with great skill. The book is valuable as a history, and we think will prove invaluable as a stimulus. Every intelligent Christian woman in America should read it. Every pastor should study it. The style of the writer will make that easy work. Miss Bancroft is a woman and a scholar which is at least one degree above being a gentleman and a scholar.

CHRISTIAN THOUGHT.

SCIENTIFIC THEORIES AND CREEDS.

[Delivered before the American Institute of Christian Philosophy, 26th July, 1889.]

BY PROFESSOR CHARLES F. HIMES, OF DICKINSON COLLEGE.

THE topic as announced for this paper is very comprehensive, and suggests in a general way variety of treatment. In preparing the remarks for this occasion my thoughts have been largely controlled, and perhaps have been given a more practical coloring, by the experience of a busy professional life. As a teacher of science for a quarter of a century, I feel that the character and degree of influence cannot be overestimated that is exerted upon the youth who are pursuing the highest, most advanced education that this intellectually active era affords, by the nature of their earliest contact with physical science at those points at which it is supposed to antagonize cherished religious beliefs, and by the spirit in which, and methods according to which, the questions arising may be met. The bias with which a youth enters upon the study of any branch of physical science has much to do with the treatment of it by one who is to direct and assist in its study, and I think it will be found that the influence of current public opinion upon the relation existing between scientific study and accepted religious beliefs, as reflected in the minds of the youth of average intelligence, however it may be accounted for, is not favorable to what might be called the most natural method of instruction.

The following incident is in a high degree illustrative of prevalent public feeling upon this point: At the brilliant assemblage of scientific men at the farewell banquet given to Professor

Tyndall, as he was about to sail for England, eminent men of all professions were present to do honor to the man and the occasion. Clergymen were assigned prominent parts. In rising to reply to a formal toast, one of the most eminent of the latter, stung by an apparently trifling remark of one who had preceded him, said: "It seems sometimes as though science and religion had met in a very narrow path, on a dizzy ridge, and were interlocking their antlers in a struggle that must be fatal to one or the other of them. If it comes to this, I think history suggests that science, and not religion, must go down the cliff." The situation seems to be that of an armed peace, in which slight provocation brings prompt attack, and in which branches of knowledge, if not naturally helpful, at least not necessarily antagonistic, are made to weaken each other's influence for good. Theories are often made to carry more than they contain. Devout masters in science are ignored, and doubts or half-formed opinions of others are magnified. Taking advantage of the frame of the public mind, there are too often those who yield to the temptation to gain attention by parading this supposed antagonism of science to religion, or to rouse flagging interest, as often may be done by a blow on the desk, a stamp of the foot, or a loud exclamation; and too often it is false science that comes under review. To illustrate it from political practice, if it be allowable, it resembles somewhat the bloody shirt in national politics.

This illy-concealed, or half-suppressed anxiety in regard to science as a natural enemy of religion is also exhibited in the eagerness with which, by a feebler class of minds, any assertion or suggestion or theory is seized upon that seems to antagonize science, and with a heartiness of welcome directly proportional to the fundamental character of the attack. Perhaps nothing in recent years has illustrated this so fully as the reception given to the vagaries of Wilford Hall. A large proportion of his endorsers have been clergymen; certainly it may be said with safety that the most intelligent of his readers have been clergymen. Now what could have aroused so great and so sudden an interest in the scientific theory of sound, and could have induced them so readily to assent to a new theory, not only contrary to

that held by all who had in any way contributed to the advance of acoustical science, but one, the analogue of which applied to light, with the great name of Newton to sustain it, and which was purely hypothetical in its basis, the scientific world had been forced to abandon because outgrown. A prominent pastor, an educated man, respected for his years and learning, honorably connected, too, with the cause of higher education, seized upon the book as almost a new revelation, and expressed himself as having received new light on the great question, among others, of immortality. That subsequent calmer consideration did not justify his extravagant first expressions and expectations only illustrates more fully the proposition that there is a disposition on the part of many to consider favorably what would seem to promise a new weapon, or a new mode of attack upon science, and that if the whole edifice, as at present constituted, should fall, it might be a matter of congratulation.

Now, nowhere is this suspicion of science lurking so near the surface and more manifest than in the average thoughtful college student. As he enters upon the study of geology, for example, the danger-signals seem to have been set up about its portals. At the start, it will be found that thoughts about the Mosaic cosmogony, about the antiquity of man, etc., are troubling him, and that long before the *Eozoon Canadense* puts in an appearance, the great question of man's relationship to the monkey has agitated him.

Now, it is a fundamental article of our belief, that there is no antagonism between science and religion, and that in the nature of the case there can be none ; and for a similar reason, whilst admitting as possible recognition of general agreement, we can look with utter indifference upon the multitudinous schemes of reconciliation of science and religion, as the term is usually employed ; that is, in the sense of adjusting or explaining away, often into the minutest details, of apparent conflicts, with the prospect that in a few years, as far as science is concerned, the details will be so changed and multiplied as to require the recasting of the whole scheme of reconciliation, when, too, more advanced exegesis may even cease to call for it. This proposition will receive support from the most superficial considera-

tion of the nature of scientific theories, their foundations and superstructure, their purpose, their elements of permanency, the permanency of their effects upon the thought and life of the race, the tenacity with which they are held, and the risks men will take by reason of them. It is not necessary to take any disputed theory, but let it be the grand pivotal theory of physical science, universally accepted, of which the race is proud, the mention of which calls up great names ; a theory that looks backward thousands of years, and peers into the unlimited future ; that, as far as we know, and as we believe, penetrates the utmost limits of the universe, fixing with equal precision points in time and space—namely, the so-called theory of gravitation. We are hardly surprised that, as Newton approached the termination of his calculations, and his great guess, his great hypothesis, that the moon might simply be a falling body under the same influence, under the same laws as a stone at the surface of the earth, he should have become so agitated as to be obliged to call in aid to complete the computation. He saw all the old celestial machinery disappear. But what was substituted for it ? Nothing ; not even what was regarded as a rational hypothesis. Gathering together all observed facts and data, all established laws, he could say that the planetary bodies moved as if acted upon by a mutually attractive force, or a mutual tendency of approach, which varied as the square of their distances and the products of their masses.

But this attraction was repudiated by him, and the tendency to approach was without explanation. It involved the apparent absurdity, violative of all experience, of action of a body where it is not, without the intervention of a third—of action at a distance ; and, looked at as a purely physical fact, it involves it as much to-day, after the best thought of the world has been expended upon it, and after innumerable schemes have been devised and discussed for its explanation, many of which have seemed to some to meet all required conditions. A glance at a few of them will serve our purpose. Newton, three years before enunciating his grand law, and without connecting in his mind the phenomena of planetary motions and falling terrestrial bodies, suggested as an explanation of the latter the existence

of an all-pervading ether, or rather of a variety of ethers, from which all kinds of matter might have been formed by condensation. Now this ether, he suggested, might be insensibly finer and finer from the top of the atmosphere to the earth, and from the circumference to the centre. As a consequence, "imagine now any body suspended in the air or lying on the earth, and the ether being by the hypothesis grosser in the pores which are in the upper part of the body than in those which are in the lower parts, and that the grosser ether being less apt to be lodged in those pores than the finer ether below, it will endeavor to get out and give way to the finer ether below, which cannot be without the body's descending to make room for it above to go into."

After the discovery of the law of gravitation, attraction was simply a name that covered an unknown cause. Ten years afterward he wrote of the suggestion of "gravity as essential and inherent to matter," "pray do not ascribe that notion to me," and afterward, "that gravity should be innate, inherent and essential to matter, so that one body may act upon another at a distance, through a vacuum, without the mediation of anything else, by and through which their action and force may be conveyed from one to another, is to me so great an absurdity that I believe no man who has in philosophical matters a competent faculty of thinking can ever fall into it." The law is simply an expression of facts; he was unable to frame an hypothesis to account for it. But twenty-five years afterward, yielding to the irresistible temptation to explain—that is, to remove by one step further the inscrutable Cause—he comes back to the hypothesis of an ethereal medium, now enlarged to fill interplanetary space and all matter, rarer in the vicinity of and in the planets, and causing them to tend toward each other. This theory he subsequently abandoned because he could not overlook the effect of this interplanetary something, even if he called it ether, upon the motions of the heavenly bodies; and, with the rejection of this theory, he also abandoned the modern undulatory doctrine of light and color dependent upon it, and gave the influence of his great name to the corpuscular theory of light. Nearer our day, Young, who was more interested in the

undulatory theory of light, found no difficulty in relieving it of the feature so objectionable to Newton, by adding to the ether the property of repulsion for all other matter, and ability to pass through the apparent substance of all material bodies with the most perfect freedom. But whilst Newton felt constrained to abandon the theory of an ether, he so far, at the same time, modified his opinion, previously expressed, of action at a distance, as to concede to small particles what he could not concede to large ones, namely, "some certain powers, virtues or forces by which they act at a distance."

Since Newton, almost every philosopher has speculated upon this very unsatisfactory subject. In 1734 Bernouilli, the great mathemetician, combined in an ingenious way ethereal vortices and Newtonian emissions to account for the apparent attraction of the heavenly bodies, in an essay that was crowned by the French Academy. He finds in the systems both of Newton and Descartes, to use his own words, "insurmountable difficulties," and says, "according to my system two kinds of matter are conceived as occupying interplanetary space, and also two principal movements in the celestial vortex. The one primal element out of which the Creator made the second is perfectly fluid, without coherence, presents no resistance to motion through it," "without constituent parts, without inertia, the same in effect as a vacuum." Worked out in its minutest details, with its vortices, its rain of pellets, etc., etc., he closes self-satisfied, with the exclamation: "What, then, becomes of the system of M. Newton, when its very foundation is tumbled into ruins? I am surprised that not one of the partisans of this hypothesis has perceived this incongruity in attributing attraction as an essential quality, not only to large masses, but even to elementary particles destitute of pores." But still this same Bernouilli gave it as a maxim: "In physics we should banish the practice of explaining phenomena by chimerical principles more obscure than those presented for investigation."

Later, Lesage, an eminent physicist and mathematician, solved this vexed problem so completely to his satisfaction that in transport of enthusiasm he wrote to his father: "Never have I felt such satisfaction as at this moment in which I have just

succeeded in explaining completely the principle of universal gravitation." His was a theory of ultra-mundane corpuscles, moving in right lines in all directions in space ; where these were intercepted by two bodies, the bodies, not being acted upon by impulses between them, were driven toward each other—they formed, as it were, reciprocal mechanical shadows to each other. This theory necessitated the further hypothesis that particles and masses of matter are cage-like, and allow many more of these ultra-mundane particles to pass through them than to be stopped by them. Professor Maxwell, looking at this theory from the point of work done, energy consumed, was forced to the conclusion that under its operation the whole material universe would in a few seconds be raised to a white heat. But chimerical as the theory appears in many of its aspects, Prevost, eminent as a physicist, remarks of it : "I pause at the foot of this majestic edifice with a sentiment of hope, persuaded that the labors of the founder will not be suffered to perish, and that men of genius will share with me the admiration it has inspired." Professor Tait, in discussing vortex-motion, that is, the rotation of something with which the universe is filled, which we have no right to call matter, but which rotation is assumed as the basis of all that appeals to our senses as matter, speaks of the hypothesis of Lesage as "the only plausible answer to this" (the problem of gravitation) "yet propounded," and again of this "very ingenious idea," "the outcome of the life-work of Lesage," as "the only even apparently hopeful attempt to explain the mechanism of gravitation." But Sir John Herschel, on the other hand, was forced to regard it as "too grotesque to need serious consideration."

So the celebrated mathematician Euler regarded it as of importance to know whether the heavenly bodies pulled each other, or were pushed together as if they attracted each other, but contended at the same time that "persons fond of clear principles in philosophy could not see how two bodies at a distance can act upon each other if there be nothing between them." Even his notion of God as a creator does not help him, for he says : "Let us suppose that before the creation of the world God had created only two bodies at a distance from each

other, that absolutely nothing existed outside of them, and that they were in a state of rest: would it be possible for one to approach the other, or for them to have a propensity to approach? How could the one feel the other at a distance? Whence could arise the desire of approaching? These are perplexing questions. But if you suppose the intervening space is filled with a subtle matter, we can comprehend at once that this matter may act upon the bodies by impelling them," and persuades himself that by this hypothesis he banishes "occult qualities" from the question. So through the long list of eminent men of science who have speculated upon the subject, there is the feeling that "the idea that two inanimate bodies could act upon each other at a distance, without some other means than mere tendency or inclination, is strongly unphilosophical"; whilst the hypothesis of ether, called fancifully, in recent days, the "mother liquor of the world," seems so natural, so helpful to all, as it matters not at all if it does require that at one time these ultimate particles be endowed with attraction, at another with repulsion, and as whatever other property may be necessary can be inserted as required.

The preceding views have been for the most part those of mathematicians and astronomers, and it is of interest to know how that prince of investigators, the man who perhaps in his day enriched science more than any other, and who acknowledged no indebtedness to mathematics, the great Faraday, regarded and investigated this subject, for of course it could not escape him. He says: "The safest course is to assume as little as possible." "A mind just entering on the subject may consider it difficult to think of the powers of matter independent of a something to be called the matter; but it is certainly far more difficult and, indeed, impossible to think of or imagine that matter independent of the powers. Now the powers we know and recognize in every phenomenon of the creation; the abstract matter in none; why, then, assume the existence of that of which we are ignorant, which we cannot conceive, and for which there is no philosophical necessity?" So he suggests that, whilst the centres of force may vary in distance from each other, that which is truly matter is continuous, and that matter fills all

space ; and he is inclined to regard the cause of gravity as resident not merely in the particles of matter, but constantly in them and in all space. The subject was one of frequent contemplation by him, and of experimental investigation, to detect, if possible, some relation between the force of gravity and electricity and other forces. The same round of speculation is followed by many others. One at last reaches the conclusion : " Why not assume it to be a force, without calling in the aid of corpuscles or a medium filling space ? " but then, by a singular *non sequitur*, says, " The nature of the force is not what it seems and is called, namely, an attraction, a tension, but a pressure."

What impresses us most in these labored explanations that do not explain is the unwillingness or inability to regard a fact as ultimate—to admit material action without material contact or connection. They will fill up the intervening space between two bodies with insensible matter, whatever that may be ; they will endow it with all imaginable desired properties ; they will devise the most elaborate and cumbersome mechanism to relieve themselves from the violation of an axiom, rather metaphysical than physical, where the spaces are sensible ; but they seem to experience no discomfort when the spaces are equally demonstrable, if not sensible. All physical science is founded on action at a distance. Molecules and atoms are widely separated—as widely, in proportion to their sizes, as the members of the planetary system. It is difficult to comprehend or concede what molecular physics demands in this respect. Newton expressed it in a most impressive way when he suggested that if the matter of the earth were in absolute contact it might not occupy more than a cubic inch. The pull of a rope, the push of a rod is extended over inter-molecular spaces, which are as real as those between the planets. There are investigations that demonstrate want of contact with exertion of force. It seems to have been a very trifle, then, that called forth all the expenditure of mental energy to explain gravitation. The negative induction that there is no mechanism between the earth and the sun, that there are no ultra-mundane particles to account for their mutual action on each other, may not be allowable ; but certainly no hypothesis up to the present time has furnished the

mechanism, and no phenomenon has demanded it, and every principle of sound induction justifies the assumption here of an ultimate fact. Matter is endowed with the remarkable property of action at a distance, which, with J. Stuart Mill, we cannot but feel is intrinsically quite as credible as action in contact. Matter to me is nothing but a bundle of properties recognizable by my senses, all of which, in their ultimate nature, are equally incomprehensible with such action at a distance.

But let us look for an instant at a dead theory, and compare it with its living successor. Facts of a chemical character, affecting the nature of substances, early observed, were at different stages of the world's progress differently grouped, according to the controlling purpose and theoretical explanation. During one period alchemy directed investigation with its theory of transmutability of substances, and the pursuit of gold as its object. At a later stage, after healing of diseases had for a time been the most prominent object, a period more strictly scientific in aim and spirit set in, during which one phenomenon, by reason of its general interest and constant occurrence, assumed a dominating prominence, namely, that of combustion. A piece of wood passed away in flame, leaving but a trace of itself, sulphur and oil likewise, and many other substances. The inference was clearly allowable that something in all these cases escaped, and that something was given the name Phlogiston, and the phenomenon of combustion was explained by the theory that every combustible body contained phlogiston, and its escape from the body constituted combustion. But it soon expanded to take in other facts, at first sight very diverse. It was noticed that wood experienced a slow change in the air, unaccompanied by flame or appreciable heat. This also was explained as due to the escape of phlogiston. Again, many metals were observed to change slowly in air, more rapidly when heated, leaving what was termed the calx. The theory proved capable of grouping together, too, these apparently widely separated facts. They were all simply cases of escape of phlogiston. The theory seemed capable of indefinite expansion, and long stood the test of explaining satisfactorily all kindred facts, and directed and incited investigation, having the full

assent of the most gifted investigators. The phlogiston period of chemical science was one of the most fruitful. But with more careful investigation, it was found that the calx weighed more than the metal of which it was the residue,—that the rusted iron, for example, weighed more than the iron from which it had been formed by the escape of phlogiston. About this time Priestley, by heating the calx of mercury—red precipitate—released a gas from the calx and recovered the metallic mercury. As everything was tested with reference to combustion, he plunged a lighted taper into the newly-eliminated gas, and found that it intensified the combustion. The theory was big enough to take in the new discovery and give it a name. He called it dephlogisticated air, air that had no phlogiston in it, or less in it than ordinary air, and which consequently was more void of this hypothetical something, and removed it more rapidly from combustibles, thus causing them to burn faster. But the other fact still remained—of the increase of weight when a metal burned. Lavoisier paid special attention to this class of facts. He demonstrated increase of weight as an invariable accompaniment of combustion. He also found absorption of dephlogisticated air, which, controlled by an erroneous theory, he misnamed oxygen, as invariably an accompaniment of combustion. He enunciated the theory, in accordance with the wider range of facts, that the phenomenon was one of combination, not of separation.

It would seem that nothing was left but to abandon phlogiston. But Priestley met the new hypothesis by a still bolder one. Phlogiston was made equal to the emergency. Phlogiston was not ordinary matter, and it was only necessary to impute a new property to it. It was plain, in the light of the new facts, that it was specifically light, or perhaps attracted more by the heavenly bodies than by the earth ; at all events, it was perfectly clear that when combined with metals it rendered them lighter, it buoyed them up as it were ; when it left them gravity asserted itself. So Priestley died, an irreconcilable phlogistonist thirty years after his grand discovery of oxygen, which had contributed so much to revolutionize the science of chemistry and give it its modern character, that the date of the discovery is cele-

brated as the birthday of chemistry. All that seemed necessary to adjust the theory to facts with which it was so out of accord was a new hypothesis.

Just one more case illustrative of this unstable character of scientific theories. A current of electricity passed through water by plates of platinum several inches apart decomposes it. Bubbles of gas appear at each plate. Further investigation shows that the hydrogen invariably appears at one plate, the oxygen at the other; that the proportions of each are invariable. The physicist and chemist find at first, in this, confirmation of their view that water is a mass of molecules, each molecule composed of atoms of oxygen and hydrogen; these molecules somewhat like bags, containing each two kinds of shot and forming a basketful. Tear open the bags, and the different kinds of shot will be free and can be assorted. Tear open the molecules by an electric current, and the oxygen and hydrogen atoms will become free. But just here the most remarkable and puzzling fact presents itself: all the oxygen goes to one plate, and all the hydrogen to the other plate. Nothing indicates a passage of either of them through the liquid. Of course there are explanations, but they introduce new difficulties. Clausius meets it with a suggestion that is a revolution of our view of the constitution of water. After all, the molecules of water are not necessarily permanent combinations of atoms of oxygen and hydrogen, but the atoms of these elements are rather like partners in the dance, always paired but continually changing, and consequently always ready to obey any superior solicitation, in this case that due to their electrical character.

But there are times when scientific speculation is much bolder than cautiously formed theory. The problem of the origin of life on our planet, as a purely physical one, will always be a vexed one. But the bold suggestion, soberly alluded to as one theory, in an address before the British Association for the Advancement of Science, by its President, that the germ might have been brought to our planet on a meteorite, is greatly to be admired for the bound with which it cleared all difficulties, and the consummate ingenuity with which it converted the problem into one for extra-terrestrial philosophers. Now, taking at hap-hazard any of

the theories of physical science, and following it from its earliest stage of speculation, through half-formed guess, clearly outlined hypothesis, to the final, completely-formed, crystallized theory, we will find ourselves called upon to accept much that is extra-sensual, furnished by the scientific use of the imagination, much invented to act upon matter and through it, because matter being too real cannot be endowed with all the properties necessary to explain its phenomena. Hypothetical substance, or something, is plastic, can be shaped, is extensible, can be packed full of properties, even mutually contradictory ones, as well as contradictory of those of ordinary matter, if desirable; it has no power of refutation; no *reductio ad absurdum* touches it. We can believe in it, and express our belief in it without fear. I cannot resist emphasizing this statement by a quotation or two from Sir William Thomson's lecture on the "Wave Theory of Light," in the Academy of Music, in Philadelphia, in 1884, during the combined meeting of the American and British Associations for the Advancement of Science. He says: "I move through this luminiferous ether as if it were nothing. But were there vibrations with such frequency in a medium of steel or brass, they would be measured by millions of millions of millions of tons action on a square inch of matter. . . . What can this luminiferous ether be? It is something the planets move through with the greatest ease. It permeates our air. . . . The luminiferous ether is an elastic solid. The nearest analogy I can give you is this jelly, which you see [a dish of ordinary gelatine as prepared for the table]. What we know of the luminiferous ether is that it has the rigidity of a solid, and gradually yields. Whether or not it is brittle and cracks we cannot yet tell, . . . but you may regard the existence of the luminiferous ether as a reality of science; that is, we have an all-pervading medium, an elastic solid, with a great degree of rigidity; its rigidity is so prodigious in proportion to its density that the vibrations of light in it have the frequencies I have mentioned." So Young, at an earlier date, remarked that "the luminiferous ether pervading all space, penetrating almost all substances, is not only highly elastic but absolutely solid." Yet, as Sir William Thomson says, we move through it as if it were nothing.

Now no one will dispute the undulatory theory of light as a working hypothesis, but the fundamental assumptions upon which it rests are hardly conceivable; and we can almost as readily accept the kindred suggestion of Dr. Young, that there may be independent worlds pervading each other, unseen and unknown, in the same space.

Now let us turn from these physical facts and speculations based upon them, with their demands upon us, to the basis of facts underlying our generally received religious convictions. There is no fact better established in history than that Jesus Christ lived,—simply as a historical fact, whether regard be had to the amount or character of the evidence. As to the character of His life, His teachings and their influence, there is the same general acceptance. I can do no better at this point than to quote from the latest work of one whose early training gave, and was intended to give, an atheistic bias. After the most compact, destructive and frigid consideration of nature, religion and theism, John Stuart Mill concludes: "Whatever else may be taken away from us by rational criticism, Christ is still left; a unique figure, not more unlike all His precursors than all His followers, even those who had the direct benefit of His personal teaching. It is of no use to say that Christ as exhibited in the gospels is not historical and that we know not how much that is admirable has been superadded by the tradition of His followers. . . . Who among His disciples or among His proselytes was capable of inventing the sayings ascribed to Jesus or of imagining the life and character revealed in the gospels? Certainly not the fishermen of Galilee; as certainly not St. Paul, whose character and idiosyncrasies were of a totally different sort; still less the early Christian writers, in whom nothing is more evident than that the good which was in them was all derived, as they always professed it was derived, from the higher source. . . . But about the life and sayings of Jesus there is a stamp of personal originality combined with profundity of insight which, if we abandon the idle expectation of finding scientific precision where something very different was aimed at, must place the Prophet of Nazareth, even in the estimation of those who have no belief in His inspiration, in the very first rank

of the men of sublime genius of whom our species can boast." Now as to His death and the manner of it there seems to be no dispute. As to the grand crowning event of His reappearance upon earth—His resurrection—a fact so incomprehensible, so inconsistent with experience, so exceptional and, at the same time, so colossal in its demands and in its influence, no evidence has been more carefully traversed in the spirit of hostile criticism than that which relates to it, with the result that the fact is accepted on evidence by the must cultured of the race. If it were not a so-called supernatural fact, to doubt it would be to be ridiculed. That there are those who dispute it is not to be denied or concealed; but even among those who do not accept all that orthodox faith concedes, there are some who cannot close their eyes to the evidence on this point. For example, Baur says: "Only the miracle of the resurrection could dissipate the doubt that seemed inevitably to consign the faith itself to the night of eternal death. What the resurrection actually was lies outside of the sphere of historical investigation. The historical consideration is only concerned with the fact that for the faith of the disciples the resurrection of Jesus is a matter of firm and incontrovertible certainty." Volkmar, the sceptical critic of Zurich, says: "It is one of the most certain facts of the world's history, whether we can explain it or not, or however we may explain it, that Jesus the crucified appeared in glory to His disciples." The rationalistic critic, Theodore Keim, bases the reality of the resurrection of Christ on the fifteenth chapter of I. Corinthians, and refutes the vision hypothesis.

How, then, do these scientific theories and religious beliefs stand related to each other? This is a broad subject, and a few points only will be hastily noticed. Physical theories are concerned exclusively with facts of sense. The verifiable facts upon which they are based are not only very limited in number, but lie within comparatively narrow limits; beyond these they can scarcely suggest anything that demands our assent. They tell of no primal cause; they afford no final explanation. Whilst without the use of the imagination acting on the comparatively scanty material afforded by the senses, science could not advance, if it could exist at all, and whilst no restriction can be put upon

this use of the imagination, to the very verge of vagary, theories elaborated by means of it cannot be conceded a voice in the determination of questions not clearly within physical limits; that there are facts not physical is incontrovertible. The duality of human nature is a fact as indisputable as any fact or induction of physical science. Realizing the existence of an extra-physical realm of facts, scientific theories cannot be regarded as the only touchstone of truth. There are questions that involve other than purely material data, and justify in their consideration as truly historical imagination and religious imagination in their broadest sense, that imply historical, philological, metaphysical research. Let us recur for a moment to the great fact of Christ's resurrection. It has been alleged that the evidences of such a fact were too feeble, and that they were too poorly adapted to the faculties of those for whom they were intended to be credited to infinite wisdom; that the plan for the introduction of Christianity was in fact a bad one. This might have been a plausible argument in the early centuries, but eighteen hundred years of history must be taken into the account to-day, and they answer it. The plan has worked; the world has accepted the fact,—not the uncultured, illiterate world, but the most advanced races of the world; and to-day the race that makes the intellectual efforts of the most cultured Greeks and Romans its entertainment and pastime accepts it; and as advance in means of intercommunication is made, and at the ever-widening circle it comes in contact with the cultured or barbarous heathen, the faith continues to prevail. We have our parallel in physical science. There are sciences of observation in which experiment can play no part, or a very subordinate one. They require time to take shape and perhaps longer time to verify conclusions. Astronomy, with its law of gravitation, required time for growth, time for most complete verification. Thus to-day we do not need the miracles of Christ to confirm our faith. We have the much greater and more indisputable miracle of the prevalence and continued spread of Christianity after eighteen hundred years. I am not sure but that the true prayer-test requires time, and that history will settle the question of the place of prayer in God's infinite plans better than the limited

wards of a hospital and a few weeks of time. Prayer, were our vision comprehensive enough, might exhibit itself in history and in the complex problems of individual existence as gravitation in the mechanism of the universe.

The more we consider, then, purely scientific theories and their bearing on questions of purely religious belief, the more independent these seem of each other. Some years ago the relation of religion to science seemed well put by Carl Vogt, the eminent materialist. In the great annual meeting of the German Scientific Association the question of the place of the next meeting was up for discussion. Innspruck had been prominently named. Some objected that it was priest-ridden. The discussion took a wide range, and was being conducted not in the best of temper, when Carl Vogt arose, obtained the ear of the assembly, and almost with a tone of authority ruled out this feature from the discussion by simply saying: "Gentlemen, as a body of scientific investigators, we stand above or below this question of religion." It is true that at times there is a seeming conflict between science and revelation, and consequent great temptation to reconciliation of the two, which as before suggested could only, in the nature of the case, be temporary, even if satisfactory. Science is very young and progressive; its basis of facts will be enlarged and its views may be changed to-morrow. It is unreasonable to expect to reconcile eternal verities and shifting theories. At the same time biblical exegesis is not stationary, and our conceptions of God and His plans are not unaffected by its progress; the reconciliation of to-day is certain to need revision to-morrow. Human thought, instead of moving on conflicting lines, rather seems striving along two lines that never touch, but still not necessarily parallel, or without a point in common. But mathematics demonstrates, what we must concede, that two lines may approach each other, as the hyperbola and its tangent, only to meet at infinity. The relation of science and religion to each other is not that of an inadmissible and inconceivable dualism, but, as it presents itself to me, is rather of this asymptotic character. There can at present be no conflict because there is no possible contact. But they are not moving on parallel, independent lines, but on lines related to each other and always

approaching, and that, as the race progresses, will meet and find their complete coincidence in infinite knowledge, as they sprang from the same infinite mind. There is no such thing as absolute scientific certainty. Our knowledge of what exists will always necessarily be incomplete; the ever-widening circle of ascertained facts only brings us in contact with still vaster unsolved problems. Every theory opens up more questions than it solves. There are no inductions that are safe far beyond the range of established facts. The law of gravitation may prove some day to be only an approximation to truth, and the grandest generalizations, not excepting that of the conservation of energy, which dominates science to-day, may prove in a higher state of intelligence to be conclusions from a very limited range of facts in the material universe. It is perfectly scientific to believe that even less than infinite intelligence might discover perfect harmony and logical connection in many cases where we see only contradiction and disagreement.

In the very nature of the case, then, we should expect scientific theories and creeds to have a different tenure upon the human mind, and their consideration to produce correspondingly different mental attitudes. Theories to the scientific man are in no sense analogous to creeds; they are no more than card houses, giving equal pleasure in their destruction as in their building. The progress of science is marked by their abandonment, and always will be. There is neither sentimental attachment to them, nor reverence for them, nor belief in them. They have in them much of the stuff that dreams are made of. At most they involve nothing higher than temporal and material interests, and perhaps not these. They are intellectual necessities as working hypotheses, that may reasonably be expected to be supplanted by better ones, as an artisan may change his tools. They are the scaffolding to a higher elevation, to be abandoned for another that will reach still higher. They are modes or tendencies of thinking rather than opinions, much less convictions. No one would risk much for his scientific belief, much less die for it. Galileo recanted, but did not lose scientific cast. As a result, in matters of science investigators can be indifferent to results, bold in speculation, variable in their

opinions, trifling, if they choose, in statement, always ready to challenge and test their scientific beliefs. The mental habits engendered may be carried over into the discussion of phenomena of a different character, of beliefs that involve essential truths, that are fundamental and ultimate, that are far-reaching as eternity itself upon man's happiness, and for which men have cheerfully died rather than recant. If scientific pursuits, as ma nyfear, produce a tendency to religious scepticism, it would seem to be rather by reason of habitual scepticism in regard to their theories than by reason of their conflict with religion.

On the other hand, those accustomed to theological investigations are perhaps prone to over-caution, even to the verge of timidity, to be conservative rather than progressive, dogmatic, and even intolerant. As a consequence, theology may often be slow to recognize the aid of science to higher conceptions of God and His plans. Scientific theories are apt to be prejudged, under influence of fancied or feared antagonism to revelation, whilst there often seems to be a toleration for any conception that does no violence to the letter of the Book. No grander, more comprehensive sentences were ever uttered or penned than those of the opening chapters of Genesis. No firmer starting-point for science has ever been suggested than: "In the beginning God created." At the same time, no words could leave men freer as to the detailed conception of God's plan of creation. And yet, at no point has suspicion of science been more grave and antagonism more feared. Any interpretation would be tolerated that would profess to be, and seem to be, in accord with the text. Perhaps to-day Milton would yet be regarded as a safer exponent of God's plan of creation than Darwin. Remembering that when Milton wrote, geology as a science had no existence, and paleontology as a branch of it was undreamed of, we may be able to pardon the grossness and offensiveness of his conception; but if anyone were to write "Paradise Lost" in this nineteenth century all should protest against such treatment of the account of creation, such liberty taken with the inspired writing. Let us emphasize by an extract: "The earth

brought forth," etc., says Moses. The poet improves or amplifies it thus :

> "The earth obeyed ; and straight
> Opening her fertile womb, teem'd at a birth
> Innum'rous living creatures, perfect forms,
> Limb'd and full grown. Out of the ground uprose
> As from his lair the wild beast, where he wons
> In forest wild, in thicket, brake, or den ;
> . . . . . .
> The grassy clods now calved ; now half appeared
> The tawny lion, pawing to get free
> His hinder parts, then springs as broke from bonds
> And rampant shakes his brinded mane : the ounce,
> The libbard, and the tiger, as the mole
> Rising, the crumbled earth above them threw
> In hillocs : the swift stag from underground
> Bore up his branching head ; scarce from his mould
> Behemoth, biggest born of earth, upheaved
> His vastness ; fleeced the flocks and bleating rose,
> As plants : ambiguous between sea and land
> The river-horse and scaly crocodile."

From this conception of Milton of 200 years ago, who would not turn to-day, in this nineteenth century, to one that permits God to work through more all-embracing laws or creation of wider sweep? "Paradise Lost," as an English classic, will always hold a place in our libraries, but with a conception of Deity so low, with its thinly-veiled polytheism, with its multitudinous figures imported from pagan mythology scarcely changed, with its unpleasant anachronisms, and with this travesty upon Genesis, not simply unscientific, but grotesque, it may be questioned whether it should be put into the hands of the young, as it frequently is, with extravagant endorsement as a Christian classic. Is it not possible that, to one encouraged or allowed to form a conception of God's plans by aid of such representations, a reaction may come with larger intellectual growth that will sweep away more than this conception? No two of us see things precisely alike. The point of view of maturer years gives us different impressions from those of earlier years. These word-pictures no less than visual pictures, make their own peculiar impress. In regard to the latter, we often have clearer evidence. A few years ago I stood before one of Murillo's finest Madonnas, con-

sidered worthy to be placed in the same *salon* with that of the Immaculate Conception. The eyes of my little girl, of three and a half years, were turned to the same picture. She burst into loud and pleased laughter. There was nothing apparently within range of vision to account for it. But the laugh was genuine and continued, and was evidently excited by the picture. Upon enquiry as to the cause, she replied, pointing to the upper part of the picture, with childish glee: "Why, papa; look at that old man trying to catch those babies, but he can't!" It was the representation of God, stretching out His hands in benediction over the scene, with the cherubs floating in mid air. Could I say, "My child, that is God, or a representation of God," with all the necessary explanations, without running the risk of leaving an ineffaceable impression? No; the only plan was to join in the laugh, and leave the artist's conception of God the Father to take care of itself. So it is with Milton. It is not the question of evolution as a scientific hypothesis, or any other hypothesis, as to the mode of creation that I am discussing, but rather whether we should be restrained by motives of timidity from carefully, calmly and candidly considering any contribution or suggestion that science may make toward a higher conception of God the Creator than a literal interpretation of the text can afford. My own opinion of evolution does not enter into the case. I certainly would not hesitate to accept it as more than a bold speculation, as a reasonable scientific theory, certainly as a working hypothesis of grand possibilities, if the facts were sufficient in number and character to compel me. I may be slower than others; my lines of study and research do not lie in that direction; I have not the facts and have not the training to comprehend the facts as thoroughly as those who have found their life-work in that direction; consequently I cannot reach as soon the point reached by Professor Huxley during his visit to America, when he stood before the fossils of many-toed horses in Professor Marsh's collection, and said substantially, as reported, that what had been provisionally received before had become certainty, and that evolution was as clearly demonstrated as the Copernican system. But accepting the theory or not, as scientific theory, I can be

thankful to science for inciting through it to a more enlarged conception of God.

Again, scientific theories, as we have said, are simply working hypotheses, provisional, to be eventually discarded ; but still during their life, be it brief or long, directing and largely controlling scientific activity, but still tending in the end to destroy themselves, or to become merged by expansion in some grander generalization. With creeds, on the other hand, as they involve eternal verities, increase of knowledge should only add to the firmness with which they are held, and does, as far as all the essentials of the Christian creed are involved. There may, it is true, be a tendency to contraction, and especially on the part of the more enlarged confessions of faith, largely the outgrowth of the activity of the period of the Reformation, by the practical neglect, rather than elimination, of such articles as are or should be matters of purely individual speculation; and denominational lines, first originating in such points as has been stated here as a matter of experience on the part of some, are practically to-day becoming more and more merely lines of convenience, or of social or other preferences. But this tendency to contraction is a tendency to concentration that can only bring into more marked prominence the grand central figure and the great cardinal doctrines of Christianity. We recognize the trivial character of some subjects of theological discussion, as they abounded in the scholastic period ; and on the other hand we are coming to recognize more fully the limitations of the human intellect on other points. There are many questions for profitable theological speculation upon which it is not only permitted but expected that man should speculate ; but, after all, the results are those of speculation, shaped by the point of view, controlled by emphasis, colored by idiosyncrasies of the individual, altogether inconclusive, hardly articles of belief, but bearing to the cardinal truths of Christianity somewhat the same relation that results of speculations do to the law of gravitation. There are mysteries in the physical world hard to acknowledge, and the man of science piles one mystery upon another, persuading himself each time that he is nearer an explanation, only to begin anew. So in our theological speculations inscru-

table mysteries are encountered. We hesitate to pronounce the word mystery, or pronouncing it still set about to solve it, and try to persuade ourselves that in a measure we have accomplished it. Adherents of the two great schools of religious thought can to-day read through the eighth chapter of Romans and discover that they agree on many points. As we follow Paul step by step, and reach the inevitable doctrine of predestination and foreordination, we may be bewildered; we may say, Let us go over that again, only again to be forced to assent to what seems to be a grave contradiction of the working phase of our belief, that that corresponds in every man's creed most nearly to a working hypothesis, and we at once assert: "I know I am a free agent, I know that I am responsible"; for consciousness of free agency, and consequent responsibility is more certain than any fact in physical science. But still we cannot but feel that along the line of the argument, as we read, there was presented a conception of God as the sovereign ruler of the universe that we cannot willingly let go; a conception of God that has had a potency in the history of the race that we are yet not prepared to estimate. Can we hold both or is a contradiction presented us here by St. Paul? It seems so, and that we must make a choice. But it is only a mystery. It is not asking us to believe that a body is both black and white at the same time. A mystery is relative to our powers of comprehension and our knowledge. There are complete analogues in mathematical science. What it demonstrates we are apt to concede is demonstrated, and yet it often presents us with conclusions as irreconcilable and as incomprehensible as these. Who may not remember a species of discomfort occasioned by the necessity of admitting that two lines not parallel may never meet, in spite of continual approach, as used in illustration before. Some of the most precise theorems involve apparent contradiction greater than these, and the results of mathematical principles often appear as contradictory to our common notions as the predestination and free agency of Paul. Not all theological mysteries may be of the same high character and importance as this one. There may even be manufactured mysteries which will not repay consideration. But in regard to these secondary or subordinate

articles of Christian belief, we are no less scientific than the mathematicians when we profess to accept them, and at the same time admit that they are beyond our complete comprehension. May it not be that as investigators along the two lines of thought, the theologians and the men of science, come to know each other better, and to realize their natural differences in mental habits and attitudes occasioned by difference in subject-matter considered and in the bearings of the conclusions reached, not only acrimony of discussion, too frequently present, will disappear, but a broader charity will prevail, and with it more fruitful co-operation?

If, then, the proposition that religion, in the nature of the case, has nothing to fear from science be accepted, should it be hampered or restrained by such a fear, or should instruction in science be modified by it? There are evidences of a growth of freedom from fear in other respects. We, perhaps, scarcely realize what a great step forward was taken in the admission, not merely of the possibility, but of the desirability of a newer and better version of the Scriptures. Whatever might have been conceded to advances in philological science, since the days of King James's version, there was on the part of everyone a sentimental attachment to the book as it had been read to us at our mother's knee, as we had heard it from the pulpit. It did seem that a fuller marginal note here and a footnote there might have been made to answer all the requirements and the old text be left intact. But there is beginning to be a very general feeling that whilst nothing material has been lost something has been gained, and that not simply, either, by reason of the fuller philological knowledge of the modern translators in all cases, but in some by reason of their greater courage in statement. Thus we had been permitted to read: "God made man a little lower than the angels"; but with a courage that the old translators lacked, the modern translators have put it, as it was our right always to read it: "a little lower than God,"—a little less than divine.

Whilst on this line of thought, of increased courage as a result of firmer faith, a question that may seem bolder suggests itself: Why should they have been restricted to the revision of the

text? We speak of the Bible as the Word of God; we profess on every occasion our belief in its inspiration, and yet we must use that word with some mental reservation. That there are phrases, passages, books perhaps, that have no claim, or a very doubtful claim, upon our reverence as part of the inspired word of God, the most reverent and Christian biblical critics admit. Why should not the revision have included the canon as well as the text? Is it because the Christian world is not yet ripe for such a suggestion? May we believe that in a future, nearer, perhaps, than we imagine or hope, the word "Bible" will cover only that about which we have no reasonable doubt, with nothing wanting necessary to man's eternal salvation or highest spiritual development? Should the time come for such a revision, no fear need be entertained that any change or any omission would be made in obedience to the demand of fluctuating scientific opinion, or in conformity to the best established scientific theory; but confidence could be felt that whatever might be done would be done only in accordance with the acknowledged demands of most advanced historical and philological criticism, controlled by reverent, conservative Christian faith.

There seems, indeed, to be a trend, not only toward freer thought, but toward more courageous thought and action, along different lines in the Christian world. That a proposition should be made in the Assembly of the Presbyterian Church to re-examine its standards may seem a small matter to some, and even a very proper matter to others. But when we remember in what a forge and what an intellectual heat they were wrought out, what an admittedly wonderful expression of religious belief they constitute, how it has entered into the very fibre of the intellectual being of the most intellectual body of Christians the world has produced, and what a profound influence it has had directly or indirectly in the world's history, it is no small matter that it should be deliberately proposed to re-examine it, and re-state it if necessary, in the fuller light and under the changed conditions of the present day. Perhaps something that was born of the peculiar circumstances of the time, and which seems like an anachronism to-day, may disappear; but no one will fear that

anything will be yielded to purely scientific demands, or that any of the former power or glory will be sacrificed.

The thought that has been uppermost in the preparation of this paper has been that there is and can be no real antagonism between science and religion, but that they may be and should be made mutually helpful, and that Christian thought should not permit itself to be hampered or controlled by an imaginary dread. The times demand not only free thought, but courageous, candid thought.

PROF. G. MACLOSKIE, of Princeton, stated that the variations of scientific theory do not imply that we have had no genuine knowledge of scientific truth. They indicate advance in our knowledge; but even an empirical theory, like that of gravitation, may involve real knowledge, although we do not understand its basis, and may hereafter come to change our mode of expressing it. As between science and the Christian religion, we now observe a wholesome tendency on both sides. Christian men are willing to let scientific investigators work out their problems in their own way; and men of science are coming to recognize the truth and value of religion. Even Mr. Huxley has pleaded for the use of the Bible in schools, and has publicly defended our faith in the answer to prayer, as not open to any scientific objection. It often occurs that scientific men are—like other unconverted men—troubled in their consciences, and ignorant of the rest that the Bible reveals; and they may speak foolishly. In such cases they may need our sympathy to attract them to the Saviour. Discussions on science and faith serve a good end when they attract people's thoughts to religion. Thus Strauss rendered a service by challenging the world to study the person of Jesus, a study which has borne good fruit. Just now people seem in want of something profitable to engage their thoughts. The proposal to revise our creeds might do good, if it would draw mens' minds to great themes. Revision would probably not lead to extensive changes, and it would confirm the old views by showing that there was not much room for change, whilst the agitation of questions of doctrine would be wholesome.

THE CHURCH, THE PULPIT AND SOME ASPECTS OF MODERN DOUBT.

[Delivered before the American Institute of Christian Philosophy, 3d of October, 1889.]

By Rev. Wm. Ainley, Nova Scotia.

NO one present will accuse me of ignorance of the true sphere and first duty of the pulpit, because in calling your attention to a phase of Christian work which less directly attains that end, I do not speak so distinctly upon that point.

The thoughts expressed in this paper are but fragmentary, even with reference to the duty of the Church and pulpit towards those particular aspects of modern doubt to which they refer.

The subject is treated from the standpoint of a provincialist not only in the sense in which that phrase is usually understood, but more especially as it may be used to express the writer's relation to the centres of thought upon the great and grave religious questions of the day. They are, too, the product of a mind which has been led up out of the realm into which it opines many others will be seduced unless timely help is given, and which has considered this subject from the standpoint of observation and experience.

Hence, if there is less of scholarship and more of practical intent manifest in it, you will understand the reason.

Whatever may be claimed for the particular points brought out, the theme of the paper is only the more modern phase of an old subject. We have only to form a very slight acquaintance with New Testament history to know that the Christian Church and pulpit have had to contend with doubt in one form or another, without or within, from the earliest periods in their history.

To ignore the existence of doubt in and about our churches and congregations would be a moral impossibility, and a moral

wrong, if possible; for, that scepticism "in the form of doubt is tainting the faith of some that are strong, and killing the faith of others that are weak," cannot be denied. Where is the congregation, however illiterate or cultured, in which doubt in some form or other is not discoverable—whether in a latent or active form? And if discoverable, it should be met, for its nature is aggressive.

It is not, however, with reference to any clearly defined forms of doubt we wish to speak, but of some which, while we may strive to define them, lie beneath the surface, undetected by the casual observer.

There is a form in which this foe presents itself which is best discovered by the appetite it creates. No one can mark the appreciation with which the writings of Prof. Huxley, Mrs. Ward, or Mr. Ingersoll, and authors of kindred subtlety and skill, are read by professing Christians, not to mention those who sit under the shadow of the Church's wing, without seeing that the evil has crept within this sacred inclosure, which fact might be otherwise considered if this appetite was only offset by a stronger, or even as strong, an appetite for the works of Christian writers. Whence the indifferentism and dubiousness so apparent in our congregations, the disposition tacitly to ignore truths which form the rock-bed of moral and religious character of the Christian order, if not from the malaria which rises in the foul morasses of the agnosticism of the day? Doubtless a vast majority of these would utterly repudiate the insinuation that they are to be counted with the imperiled host. Their condition may be described as the subjects of incipient and insensible doubt, and is, therefore, one requiring the most prompt and skilful treatment.

Then it must be considered in its relation to another class, of whom it cannot yet be affirmed that they have in any degree fallen victims to the foe.

We would thus define their position. In the natural world there are properties or elements possessed by the members of the different kingdoms, and even by members of the different divisions of the same kingdom "hidden affinities," of which the general classifications of science tell us nothing; elements

which might, for aught these general classifications tell us, belong exclusively to one kingdom, upon which the life and strength of members of some other kingdoms depend; and nature assimilates these elements of the mineral to the vegetable, and of the vegetable to the animal kingdom, by processes which defy the most vigilant analytical research.

So in the world of thought there are elements which may be the common property of the believer, or the unbeliever, of which nothing is told us in the general classification of elements belonging to the realm of belief or doubt, elements which might, for aught these general classifications tell us, belong exclusively to one realm, which are essential to the existence of both.

The spirit of inquiry which in one develops into the worst forms of doubt and scepticism, in another forms the groundwork of strong Christian character, and the inscrutableness of its development into these distinct forms of thought is no greater mystery than the development of bioplasms in one case into a man, and in the other into a night-hawk.

In that interesting work of art, "The Battle of Gettysburg," as it may be seen in the city of Boston, one of the remarkable things is the ability displayed in connecting the real foreground with the artificial landscape; indeed, there are places where only the closest inspection will enable the uncultured and inexperienced spectator to discover the point at which the former terminates and the latter begins. In like manner, in the field of the battle of thought, it is difficult for the uncultured and inexperienced to discover the line between the real foreground, the scene of lawful enquiry and investigation, and the artificial landscape, the hazy realm of doubt, and before they are aware of it they may have crossed that line; therefore, while the condition of the class now referred to as possessing this spirit of enquiry in its elementary stage, which is by far the larger class, is not in itself one indicative of weakness, or one occasioning present alarm; it is one which demands immediate consideration and forethought.

From this class comes the enquiry: "Who will make us to see good?"

"From the New Testament itself," says Rev. Dr. Jesse B.

Thomas, referring to the effects of the Reformation,* "thus newly understood and set free among men, unquestionably came that injurious demand for facts, and that zealous testing of their genuineness, which constitutes the so-called 'scientific' temper of our time. It is not illegitimate. It is not in itself unchristian. It cannot be repudiated without repudiating the Protestantism of which it is an inevitable product." "Yet," he goes on to say, "this same temper has been made to lend the most powerful of all contributions to the 'influence of modern scepticism.'"

This spirit of enquiry holding its legitimate sphere is represented in Montaigne's motto—"I do not understand; I pause; I enquire." And without this spirit our belief will sink into mere credulity. That we may be strong we need to "prove all things" on the lines, and to the extent their nature will justify.

Amongst those who may be numbered in this class is the regenerated man who is still an imperfect and unfurnished man. There is in him an element which is highly susceptible to the moral and religious atmosphere he breathes; he has only crossed the Rubicon of birth, and needs all the development which constitutes Christian manhood, or he may, as, alas! too many do, fall a victim to doubt or fanaticism.

The enquiry now before us is: Have these classes of people any special claims upon the Church and pulpit? And if so, what?

We believe they have upon the Church:

1. First, because around her ramparts are waged the battles upon the settlement of which depends in the one case the removal or spread of the baneful malady to which we perceive they are likely to fall an easy prey, and in the other the right or wrong bias of the primary element to which we have referred.

2. Secondly, because she alone possesses in its purity and strength the effectual panacea and preventive for every phase of this evil, whether germinal, latent, incipient, or more fully developed.

3. Thirdly, because neither of them have knowingly antagonized her.

Homiletic Review, Vol. xiv., p. 10.

4. Fourthly, because of their ignorance, in the one case of their peril, and in the other of the possession and right use of this important element.

The nature of these claims may be defined thus:

1. First, because of the Church's more complete acquaintance with the base of operations they have a claim upon her knowledge.

2. Secondly, because of the Church's possession of the remedy and preventive they have a claim upon her beneficence.

3. Thirdly, because of the Church's consciousness of the absence of antagonism to her in both classes, and their ignorance of the possession and right use of elementary power in the one case, and of the presence of germinal, latent, or incipient peril in the other, they have a claim upon her sympathy.

These remarks apply to the Church. But is it the duty of the pulpit to treat distinctively of these subjects?

We answer affirmatively:

1. First, because it is the oracle of the Church, whence she receives her instructions and whither she looks for her defence.

2. Secondly, because the enemy strikes at the base of its authority—*The Word*; and that Word it is bound to defend and propagate against all comers.

But before we can hope to suggest any methods which are likely to succeed in this work, we must have before us, in outline at least, the present attitude of our opponents.

Where are they? What position do they at present occupy?

The skepticism of the present belongs "not to a particular doubt, but a general method of doubting; it does not consist in questioning the truth of a given conclusion, but the possibility of attaining a true conclusion at all" (Dean Mansel).* Nor is this surprising, when we find men like Strauss, Baur, Reuss and Volkmar, men of whose ability as biblical critics Prof. Huxley speaks in the highest terms, destroying each other's work; when we find Renan practically surrendering his position of antagonism to the authenticity of the gospel narrative, and Reuss stating that the synoptic gospels of Mark and Luke are authentic, and yet read Prof. Huxley's reiterated statement

* *Homiletic Review*, Vol. xiv., p. 12.

"that the four gospels, as they have come to us, are the work of unknown writers," and that "absolutely nothing" is known of "the originator or originators" of the first three gospels. Amidst such confusion in the enemies' ranks, how could any "true conclusion" be reached by them?

Then note that its chief point of attack is professedly the Scripture evidences; and yet on this very ground it is simply a negation or an evasion; it evades the discussion of the question by the very methods, and according to the very rules, by which its own leaders claim it must be settled, viz., on experimental grounds; hence it may be claimed that it practically excludes itself from the realm of authority by its professed ignorance.

Here, therefore, is the point at which the greatest watchfulness is required, viz., that while it professes ignorance, and should therefore leave the field, it is all the time working with unabating energy and consummate subtlety to undermine the throne of reason and conscience, and cut off the tap-root of the scriptural system of truth.

In the next place we may ask: What soils are most prolific of these evils?

1. The cradle of a large amount of scepticism is sinful indulgence. There have been memorable instances in which departures from original lines of truth have been at least apparently traceable to some coincidence affecting the moral status of the individual.

"The world is full of fugitives from themselves," says Rev. Dr. Gordon.* "But," he adds, "it is a bad and wretched self from which men fly, not a happy and approving self; and it is that evil self which must be touched and helped, in order that in their flight these fugitives may run *to* God, instead of running *from* Him."

How many there are who have sought refuge from sins against society, against conscience, against God, in the vagaries of modern doubt. How many are sheltering themselves from the threatening storm beneath the overhanging precipice of its tottering hypotheses.

**Homiletic Review*, Vol. xiii., p. 446.

2. Again, there are numbers upon whose escutcheon no blot of moral wrong can be found, but whose minds are seeking restlessly for light, and are entranced by the meteoric light which flashes across the horizon of their mental vision as they read:

"There lives more faith in honest doubt,
Believe me, than in half the creeds,"
—*Tennyson.*

and closing the book, exclaim "Eureka!"

But, alas! how widely does the character of their doubt differ from that of the poet's subject. Here it is:

"He *fought his doubts*, and gather'd strength—
He would not make his judgment blind;
He faced the spectres of the mind,
And *laid* them: thus he came at length
To find a *stronger* faith his own." *

Our attention must now be turned to the treatment of those for whose special benefit we write; and in passing on to this phase of the subject let us notice that:

1. First, because the foe is more subtle and cowardly, the pulpit needs to be more clear and brave.

2. Secondly, because it insinuates itself through the more vulnerable places in its victim's moral armor, the pulpit should have associated in its teachings a revelation of those weaknesses, and the means whereby they may be removed, with a declaration of the true character of the foe.

3. Thirdly, because the tendencies of our depraved nature, especially under the influence of these false lights, is to drift away from God. "No ship drifts into harbor" is a true saying. The pulpit needs to keep its buoys, landmarks, lighthouses clearly to the front, wooing by its warmth of welcome weary wanderers from the watery waste.

We are aware that Prof. Huxley and his school profess that their argument is not against Christ, but against the testimony of some writers concerning Christ; and we are also aware that it is argued by others that though the statement of some writers be proved unreliable, the remainder are still left unshaken; but whatever may be said with reference to these individual witnesses, the successful overthrow of any one of the authorities of

* Italicized by Rev. B. Gregory in a Dialogue, "Honest Doubt."

the pulpit weakens the pulpit, just as every stone in an arch which proves defective weakens the arch, however sound the rest of the stones may prove. Hence the necessity for the pulpit's defence and propagation of the Word.

We do not speak thus because we find in the present form of attack occasion for fear, but simply as a reminder of the ground of our defence. The standard of Immanuel, which has stood for two thousand years the battle and the breeze, is not to waver in the field at this advanced stage in the investigation of documentary evidence; the foes are subtle and numerous, yet we may assure ourselves that they too will share the fate of their ancestors in the anti-scriptural school of thought.

There is nothing to fear from the fact that doubt has assumed the form and taken the position it has. Its frequent change of base is one of the hopeful signs for Christianity. Such a course naturally precedes investigation. It has done so before, only to be followed by some overmastering accumulation of Christian evidence. The investigations these changes occasion are animating and inspiring. What glorious heights have been reached; what wondrous depths have been fathomed! how our faith has been strengthened! Might I cite one instance? What a panic was caused when the tidal wave of evolution first swept the shores of the continent of religious thought; but it has not left the breastwork of Christian truth one whit the weaker; nay, on the contrary, it seems stronger, because the dashing waves have only proved more fully its indestructibility. This thought may be applied to what is known as the higher criticism.

It is not the business of the pulpit to go heresy-hunting, but when in the line of its legitimate work it confronts error, as it surely will, how can it do otherwise, when its points of attack are such themes as the Personality of the Divine Being, the Sermon on the Mount, the Lord's Prayer, the Miracles, the Passion, the Resurrection, the conversion of Saul of Tarsus? or if conscious that those as whose sentinel it stands are imperiled by it, as it surely must be to-day, it is its duty to grapple with it intelligibly, intelligently, fearlessly.

Glittering generalities are enemies to the cause of truth; ignorance is equally damaging, and simpering effeminateness is

intolerable. By these scepticism is emboldened in its attack, and from these the honest enquirer turns away.

There is a possibility of our sacrificing Christ upon the altar of *our* Christianity. What avails the sentimentality illustrated by the following incident related by Rev. Dr. Jesse B. Thomas, in the presence of the light of the day? He says: * "It is narrated of a devout naturalist that, being shocked to find the saint's bones he had come to worship unmistakably those of a wild animal, he still subdued himself to worship on the ground that they were ecclesiastically genuine, although scientifically false."

Whatever traditions that we now hold sacred may have to be sacrificed, the work of investigation must go on, not merely to satisfy the interrogative spirit of the age, but to establish the truth of revelation and Christianity. It would be injurious to Christianity for the pulpit to be even suspected of putting the slightest obstruction in the way of candid and thorough investigation, not only on the ground of expediency, but the unscripturalness of such a course. While the apostolic injunction, "Prove all things," in its primary significance, has reference to spiritual things, it may, we think, be justly claimed to embrace all things which relate to the interests and propagation of Christian truth, a course evidently pursued by the Berean Christians, who "searched the Scriptures daily, whether these things were so." (Acts xvii., 10.) And if there are perils to a few arising from the reference made to points upon which doubt is entertained, there are also perils to the many arising from a disposition to hide such points, and we may safely follow the example of the New Testament writers, who did not hesitate to refer to the scepticism of early times. "Matthew records the 'saying commonly reported among the Jews until this day,' that the Lord's body had been stolen by His disciples, and the fact that at His last appearance 'some doubted.' . . . John . . . carefully details the words of Thomas, demanding to 'put his finger into the print of the nails,' and thus outlines distinctly by anticipation that very 'argument against miracles' which has made the name of Hume famous, and upon which scepticism has made no advance to this day." † (Rev. J. B. Thomas, D.D.)

**Homiletic Review*, Vol. xiv., p. 11. †*Homiletic Review*, Vol. xiv., p. 11.

Judgment must, of course, be exercised in the presentation of the points upon which doubt is entertained, and it must be borne in mind that a scriptural argument may under some circumstances be so presented as to meet and answer the questionings of those into whose minds doubt has entered without arousing the least suspicion in the minds of the undoubting. A good brother on a country charge to which we were appointed some years ago informed us on our arrival of certain peculiarities of the people and certain things against which it would be well for us to guard.

Amongst others was a certain doctrine which was held to strongly by many of them, and to overthrow their faith in which he argued, in his native shrewdness, that we might say all we liked about it and against it, but that it would be unwise to mention its name, as we might thereby alienate those we wished to convert. A method similar to this may in all sincerity be adopted in the cases presented in this paper.

Why should we hesitate, nay, rather, what encouragement we have in favor of the general course recommended, in whatever manner it may be accomplished, in that pursued by the Apostle to the Gentiles, who while declaring on the one hand, "I am determined not to know anything among you, save Jesus Christ, and Him crucified," finding himself in Athens with its pantheistic Stoics, its materialistic Epicureans and its agnostic Academicians, turned his attention to that line of argument best suited to the condition of his hearers, and proving that he had previously made himself acquainted with their classics and philosophy.

Amongst the many proofs of the desirability of this course in modern Christian work is the now famous London West-End Mission, superintended by Rev. H. P. Hughes, a distinctive feature of which is the discussion of the social and religious questions of the day.

Looking at this subject from a scientific standpoint, the intellectual difficulties are not, as might be supposed, all in the region of theology, for as Rev. Dr. F. H. Bowman tells us,* in the region of science "there are fundamental assumptions which have to be received quite as transcendent as the belief in a God;

* *Chris. World Pulpit*, June, 1888, p. 350.

difficulties quite as great, to my mind at any rate, as the doctrine of the incarnation of our Lord."

Again he says:* "If we are to reject revelation as untenable because we cannot explain away all the difficulties which surround its acceptance, are we not bound in an equal manner to reject much of the teaching of the present day in regard to the facts and phenomena of nature on the same ground? Because some of the doctrines of revelation are beyond our experience, and sometimes contradictory to our reason, must we reject them, and yet accept theories and opinions in science which are equally self-contradictory and equally irreconcilable with our reason? . . . Fancy," he says,† "being told, when you run your head against a granite wall, that it is only a tangled flexus of ether-vortices!—more unsubstantial, apparently, than the 'stuff that dreams are made of,' and yet I am free to confess that such a theory removes many of the difficulties of the ordinary ideas of matter."

Again, no scientific results would stand the test required by anti-scriptural scientists. They want the results of Christianity tested by methods which to say the least are not experimental. But put their methods to the test, and what is the result? You enter the laboratory of the chemist; he shows you the results of some experiment. You say: "I don't believe such results were brought about by such processes as you describe." The chemist asks: "Have you experimented on this line?" You answer, "No." "Then," the chemist replies, "you have no authority to speak." But our anti-scriptural scientific friend asks: "How are the results of a supernatural character brought about?" We answer in the words of the Book: "If any man will do His will, he shall know of the doctrine." (John vii., 17.) "Then shall we know, if we follow on to know the Lord." (Hos. vi., 3.) "Ask, and it shall be given you; seek, and ye shall find; knock, and it shall be opened unto you: For everyone that asketh, receiveth: and he that seeketh, findeth: and to him that knocketh, it shall be opened. Or what man is there of you, whom if his son ask bread, will he give him a stone? Or if he ask a fish, will he give him a serpent? If ye then, being evil, know how to give good gifts unto your children, how much

* *Ibid.* pp. 334, 335. † *Ibid.* p. 350.

more shall your Father which is in Heaven give good things to them that ask Him?" (Matt. vii., 7–11.) "Come unto Me all ye that labor and are heavy laden, and I will give you rest." (Matt. xi., 28-30.) *Obedience—Prayer—Faith.* But our friend replies: "I don't believe it." We ask: "Have you had any experience on this line?" He answers, "No." Upon what authority then shall he who has ruled the inexperienced chemist out on the ground of inexperience remain in this court as a judge? And yet, without exception, this is the position of these judges.

Then, if the question of testimony is brought into court, upon what does the great mass of mankind depend for its scientific knowledge? Not even experience, but "faith—on the testimony of others—since they are incapable, for want of education and opportunity, of verifying the facts for themselves." And these gentlemen who want something more than experimental proof of the truths of Christianity, ask their votaries to be satisfied with something less.

Upon the threshold of that temple into which science is incapable of entering, we may observe that we have less need to fear because we cannot give a scientific demonstration of the existence of God or the incarnation of His Son than the mathematician has because he cannot demonstrate by a chemical analysis that two and two make four, or than the anti-scriptural scientist because he cannot demonstrate his own existence.

Crossing the threshold of that temple, I would again speak through Dr. Bowman.* "I will remind you," he says, "that religion is in one respect also an experimental science—the truth of the doctrines can only become known to you, and become part of your experience, by practising them; and just as in experimental science your own knowledge supersedes your belief, and you accept a theory until you can get a better, so in religion you get a higher proof—a certitude which lies deeper than any intellectual knowledge, because it satisfies in a higher sense the needs of your life. Science cannot minister to the diseased soul, or quiet the voice of conscience when awakened by sin, or throw the brightness of an eternal day over the low,

* *Chris. World Pulpit*, June, 1888, p. 350.

dark verge of a setting life. It will not satisfy me to be told I am only, with all my powers of mind and body, with all my aspirations and inspirations and hopes—only a fleck of foam, raised by the wind for a moment above the raging sea of material phenomena, and the next moment to melt again with the unthinking wave beneath—with no personality, no immortality, except continuity of change. Some years ago," he goes on to say, "as many of you know, I was laid aside for a time with a serious illness brought on by overwork. I thought my days were numbered, and I knew it was possible I might any time pass into the unseen world. On that sick bed I found no consolation in scientific knowledge. That which strengthened me and made me to rejoice in hope was faith in the finished work and promises of Christ. No other knowledge availed anything. All my difficulties vanished in the realization of that promised experience, 'I am with you always, even unto the end.'"

It must ever be borne in mind that Christianity is more than a science; it is a life. That the Christian's motto is not "*Cognosco*," but "*Credo*"—*I believe*, "I live by." That no matter what scepticism in its arrogance may demand in the way of evidence, there are imperial heights to which in all the magnificence of its soarings science cannot climb, the difficulties of which no merely scientific acumen can ever unravel. For "the natural man receiveth not the things of the Spirit of God: for they are foolishness unto him: neither can he know them, because they are spiritually discerned." (I. Cor. ii., 12.)

"It is enough," says Rev. Dr. A. H. Bradford,* "to say that when Tyndall, Huxley, Mivart speak of physical science it is time for you and me to be still. They are kings in their own realms. But I do want to emphasize that, because some one is learned in other things, he is not, therefore, to be treated as a religious guide. The scientist, because he is a scientist, has no right to a feather's weight of influence in religion."

The following is an important statement made by Rev. Donald Fraser, D.D., of London: "It seems to me that the men whose mental training is most favorable for weighing the credibility of historic witnesses and documents, and the sufficiency

*In *Chris. Phil. Quar.*, Jan., 1882.

of moral evidence, are the eminent jurists of Christendom; and, so far as I know, these have been, and now are, almost without exception, convinced of the divine authority of the New Testament. They may not all be good men; but they see that the weight of appropriate evidence is for the Christian cause. In England this is a conspicuous fact. Some of our scientists doubt, but our judges do not." (*Hom. Rev.*, Nov., 1887, Vol. xiv., p. 374.)

From this eminence, while occupying it with humble firmness, we must never stoop to settle the more profound questions of Christianity on the principles or by the methods of scientific investigation alone.

Prof. Huxley has taken the pains to warn anyone who believes in Jesus not to "delude himself with the notion that his faith is evidence of the objective reality of that in which he trusts"; * a thing which no intelligent Christian does; for so far as Christianity is subject to scientific investigation, his language is: "Walk about Zion, and go round about her: tell the towers thereof. Mark ye well her bulwarks, consider her palaces; that ye may tell it to the generation following. For this God is our God for ever and ever: He will be our guide even unto death." And so far as the higher temple where God is worshipped beyond the range of scientific investigation, until science in her own realm has proved Zion's foundations and bulwarks unsound, we will not hearken to the opposition of science, falsely so-called, but to date claim, so far as the results of anti-scriptural scientific investigation is concerned, the old Scotch verdict, of which Rev. Dr. Deems† has reminded us—"Not proven"; and add that when the points are proven, it will be time enough to say, "Your faith is vain, ye are yet in your sins."

Let these and kindred thoughts be emphasized in our pulpits as opportunity may be given and occasion may require, and we believe they will do much to reassure the doubting, satisfy the enquiring, quiet the restless, and inform the ignorant in our congregations.

* Chistianity and Agnosticism.

† In his volume, "A Scotch Verdict *in re* Evolution," published in the Lovell Library.

While avoiding the extreme use of apologetical preaching, which we believe wrought such harm in England by producing the formalism of the seventeenth and eighteenth centuries, and against which the Wesleyan movement threw the force of its spiritual power, remembering that the power of Christianity lies in those lines of attack indicated in the conversion of Herr Von Schlumbach, the Ingersoll of Germany, to the Christian faith, of whom it is related that though he "rose exultantly" from a tilt with one of the "keenest theological gladiators," was brought to bay and conquered in a "prayer-meeting, where among others several children poured out their tender supplications to the Lord";* we must be careful to avoid the other extreme, which, as Archbishop Whately remarks, "makes each man's own feelings the sole test of what he believes." For, as Rev. Dr. Robinson, President of Brown University, remarks:† "The emotions that crystallize into character must always be the precipitates of intellectual convictions."

One of the great needs of our day is a correct knowledge of the Word. The pulpit has had its day of *topical* preaching, a style which, whatever may be said in its favor, has, we fear, failed to buttress the hearers against the inroads of doubt and scepticism as they should have been buttressed. The preaching needed to-day is that which embraces *textual*, *exegetical* investigation—*teaching*. We need more sermons after the style of the ideal sermon of the Great Teacher.

If people understood more thoroughly what is taught by temptations and the Sermon on the Mount there would be less danger from the subtle influence of scepticism. For instance, that Christianity is not a system of material satisfaction, or sensationalism, or temporal emolument, but a principle inwrought into the nature and exemplified in the life.

"That is a good sermon," says Rev. Dr. Jesse B. Thomas,‡ "which makes men hungry for confirmatory study of the Scriptures, 'to know' whether these things are so."

Now, as to our attitude towards the classes to which we have referred.

* Rev. Dr. Gordon, *Homiletic Review*, Vol. xiii., p. 466.

†*Homiletic Review*, Vol. xiii., p. 191. ‡ *Homiletic Review*, Vol. xiv., p. 10.

First, as touching those who though not doubters are unconsciously wavering. It may be asked: What can we expect from minds, the framework of whose opinions are only formed of the driftwood of modern doubt? And yet is not this the condition of the class in whose behalf we speak, to a lamentable extent? How few intelligent investigators there are. "In *what* meekness, *then*, *should we instruct* those that oppose themselves: if God peradventure will give them repentance to the acknowledging of the truth; and that they may recover themselves out of the snare of the devil, who are taken captive by him at his will." (II. Tim. ii., 25, 26.)

Secondly, of those in whom it may be said there has been no development of any sceptical tendency, yet who are nevertheless unconscious of their own peril or their own power, it may be said, as of the former class, what profound sympathy we should have with them! sympathy which finds its highest expression in Christ, as in the darkness that gathered about the cross His soul went out in the most inexpressible sympathy with those in every kind of perilous darkness by which our pathway may be environed.

We may learn an important lesson towards all from the attitude of St. Paul towards the men of Athens. He spoke no words of harsh invective, he brought no railing accusation; nay, on the contrary, as Dr. Deems has observed in his "Paul at Athens,"† "He calls their attention to the fact that in their beautiful Athens there was an altar inscribed 'To an Unknown God'; and he mentions the fact rather in commendation than in disparagement. . . . He employed all the admissions of their religion and philosophy, attacking nothing that is not radically wrong."

While it has been said that the failure of believers in so many instances to "walk worthy of it is an indication of the divine origin of Christianity," the strongest evidence undoubtedly is the intelligent consistency of the lives of those who profess it. Hence, let us "walk in wisdom towards them that are without." On the one hand being "ready always to give an answer to every man that asketh *us* a reason of the hope that is in *us* with

† CHRISTIAN THOUGHT, Vol. iv., pp. 442, 443.

meekness and fear" (I. Pet. iii., 15), and on the other by our spirit and conduct exemplifying the religion we profess to have embraced.

The greater demand of the present is for lives that will stand the experimental test, proving that Christianity makes men honest, truthful and unselfish under circumstances impelling men in the direction or providing favorable opportunities for the practice of dishonesty, untruthfulness, selfishness.

Nothing will exert a better influence with the wavering or formative state of mind than Christian character in the Church of Christ.

To any of the Church, whether members or not, who are haunted by doubts, the words of Thomas Carlyle are applicable: "Most true it is, as a wise man teaches us, that 'doubt of any sort cannot be removed but by action.' On which ground, too, let him who gropes painfully in darkness or uncertain light, and prays vehemently that the dawn may ripen into day, lay this other precept well to heart, which to me was of invaluable service: 'Do the duty which lies nearest thee, which thou knowest to be a duty! The second duty will already have become clearer.'"

With the correctness of this advice we are deeply impressed by an instance which came under our notice a few years ago of a female member of one of our congregations, a person of more than ordinary gifts, but who was greatly harassed with doubts which she was ever ready to talk about, but never ready to abandon. Instead of arguing with her we found suitable employment for her in the Church and community; as the result, her doubts took their flight long ago, and to-day her life is one of faithful, courageous toil for her beloved Master.

The story is told of a lady who advertised for a coachman. Several applications were made for the situation; besides the usual questions as to character, reference, etc., she propounded the following: "How near can you drive to any dangerous place—a precipice, for instance?" "Oh," said the first, "I can drive within a hair's-breadth." He did not suit. The second replied: "I can drive within a few feet of it." He did not suit. The third replied: "Well, ma'am, I really don't know, for

I always keep as far from any dangerous place as possible." It is almost needless to add that he secured the position. So let it be ours to keep as wide a space as possible between those who look to us for guidance and the perils by the way.

In conclusion, let us bear in mind that the work of the Church is not a work of disintegration; we will leave that for the destructionists of the agnostic school. Ours is a work of construction, the work of giving men something, of filling up the abyss, of developing elementary power, of transforming the wilderness, against the blue distances of which is read the Athenian inscription, "To *an Un*known God," into a garden "beautiful for situation, the joy of the whole earth," the light and glory of which is the illumined motto, arching the entrance to its only temple, "To *the Known* God." The work of transforming the atheistic creed, written by the infidel, and intended to be read "*God is nowhere*," into the creed full of the sublimity of the Divine Personality which his child read out of the same letters, "*God is now here*"—a transposition which led her infidel father into God. And while we are in nowise disposed to hope that the intellectual methods to which we have referred will result directly in the conversion of those for whose special benefit we have written; our hope is that they will be helpful, inasmuch as we believe they will help to disarm the enemy, demonstrate our sympathy with the enquirer and give a right bias to that element in us all which unaided is so apt to fall a victim to the foul contagion with which the intellectual atmosphere is so heavily charged.

PSYCHOLOGY A STUDY FOR STUDENTS OF MEDICINE.

[An address at the opening of the forty-ninth year of the University Medical College, New York, Oct. 1st, 1889.]

By Vice-Chancellor Henry M. MacCracken, D.D., LL.D.

IT may at first seem an idle thing that I spend even half an hour in advising and urging students of medicine to undertake as a parallel pursuit the study of psychology. In the study of medicine by itself there is enough to occupy the brightest intellect for an indefinite duration of years. No body of students are confronted by a mass of work greater than rises before you. Even the stoutest of those spirits who are ambitious to explore the realms of medical science may well quail when upon his arrival in New York twenty professors meet him, each ready to lead him by proper steps into his own specialty; when half a dozen directors of laboratories under this roof open each a wide door to a complicated workshop; when the long wards of every neighboring hospital are found accessible under intelligent guardianship; and finally, when the United States Government prints, under the editorship of my classmate of thirty odd years ago, a cyclopædia of medical literature so vast that the bare titles of books and treatises on one disease occupy densely-printed pages like the pages of Webster's or Worcester's Dictionary.

For the student facing all this to be confronted in an opening lecture like the present by a professor of philosophy inviting him to spend certain hours in the anatomy of his own mind seems, perhaps, unwarranted cruelty.

All vivisection of animals is cruelty with some people; vivisection of the human body is thought cruel by everybody. Psychology is vivisection of one's own soul. It may appear cruel to invite you to its practice. Nevertheless, I invite you to the study of psychology.

1. As the first consideration I urge that as a rule successful

thinkers have pursued, each one of them outside his special professional field, an additional subject of study.

It will be orthodox here to name Galen, or to give his name as he would have given it, Claudius Galenus. In the seventeen and a half centuries since his birth in Western Asia, in the city of Pergamos (one of the seven cities of the seven churches of Asia celebrated by St. John), no thinker on medicine has had so enduring a rule over physicians. Till universities arose in Europe, about 1300, Galen's dogmas in medicine were as undisputed as Augustine's dogmas in theology; and yet while he wrote medicine he wrote philosophy. I have never owned or read his books. I will not urge every one of you to buy them, for, even though half his works are lost, they fill twenty octavo volumes, nor have they to my knowledge been translated in any large part into English.

In the University of Oxford, England, no one can obtain the degree of Bachelor or Doctor of Medicine without undergoing an examination in either Galen, or one of three other ancient writers on medicine. If we were to adopt that rule here it would give our professor of Greek a very large class in this medical department. But I do not know of a single course in Galen's writings in any American university.

If anyone will look into Galen he will find he studied psychology as well as medicine during ten years before he began to practise. He calls mental philosophy the greatest of God's good things, τὸ μέγιστον τῶν θείων αγαθῶν. He asks his fellow-physicians to bear in mind that the best physican is also a philosopher, ὅτι ἄριστος ἰατρὸς καὶ φιλόσοφος. He prepared volumes of notes and extracts treating of the views of Plato and Aristotle, which he declares he accepts only in part. He expressly opposes Epicurus, and the assertion that the highest goal is happiness. The agnostics of his day he opposes with equal vigor.

Galen was an intuitionalist. He held to presentative intuition when he called our knowledge by the senses εναργεια, perspicuity. He held to rational intuition; the possession by the soul of certain truths prior to proof, as verified by the universal agreement of mankind. He says of true theology that it is a science far surpassing the art of healing.

It is notable that of the three ancient physicians besides Galen whom Oxford University names to students, requiring one of them to be studied, at least two are certainly known as students of mental philosophy. Hippocrates, of Western Asia, six hundred years before Galen, had as his teacher, Gorgias, celebrated as a philosopher, although not a very sound philosopher, by Plato; Celsus, the Roman physician of the time of Christ, wrote books on seven subjects, from medicine to mental philosophy. His medicine, in eight books, is still in existence. His books on mental philosophy, like those on law, farming, military tactics, history and oratory are all lost—a comforting fact to members of the medical faculty who write books on medicine. These may live 1900 years, when their other works are all forgotten.

There are physicians who have so far excelled in psychological pursuits that they are known to very few as physicians, but to every extensive reader as philosophers. I am not sure that Erasmus Darwin, who flourished one hundred years ago, wrote anything in medicine that makes him remembered by the professors of medicine of this college, yet he was a practitioner for nearly half a century. But he is remembered in psychology as one of the fathers of the associational school. He was not only grandfather of Charles Darwin, but he was grandfather in some sense of John Stuart Mill, Bain and Spencer, and the associational school of to-day. Because there is so close a bond between a given physiological phenomenon and a conscious act, we are to make the latter perhaps a mere aspect of the former. Erasmus Darwin said, one hundred years ago: "An idea is a contraction or configuration of the fibres which constitute the immediate organ of sense." Within three months a physician —a woman also—says in a leading monthly: "Volition has grown out of muscular activities."

A more valuable psychologist was Dr. Thomas Brown. He was a practising physician, but I know not how successful. (He must not be confounded with a brother Scotchman who lived half a century before him, namely, Dr. John Brown, founder of a sect in medicine, and really very noted in his profession.) Dr. Thomas Brown was not noted as a physician, but he

excelled in teaching psychology. He specially analyzed our sensations in a more extended and subtle way than anyone before him had ever done in the English language. But Brown while he rejected as intuition many beliefs which had been so called, yet held to intuition; as, for example, the belief that every event has a cause.

Brown, being a physician, proposed writing a physiological psychology. He did not live to accomplish it. Had he done so, he would have anticipated by near one hundred years the creation of physiological psychology to-day.

I have preferred to name physicians who have turned to psychology without ceasing to practise their chosen profession.

It would be quite as easy to bring up noted physicists and prove them fond of psychology.

Aristotle was the first physicist and physiologist of his day; but he was also the first psychologist. His "History of Animals" is the best contribution of Greece in that field; but his metaphysics is the most helpful book of ancient philosophy.

Descartes invented analytical geometry and expounded the refraction of light, the rainbow and the gravity of the atmosphere. But Descartes is still greater as the father of modern mental philosophy.

Newton discovered the law of gravitation. He often said to students of physics, "Beware of metaphysics," but he taught and wrote metaphysics all the same.

Leibnitz shares with Newton the honor of inventing the calculus; but he is better known as the founder of the German mental philosophy of the last century.

Even Immanuel Kant, to this day the greatest of mental philosophers, is an example of one who began with physics. His first books were on such subjects as: "Whether the Earth's Daily Rotation has Changed," "Whether the Earth is Wearing Out," and "The General History of Nature and Theory of the Heavens."

The secret of why great thinkers, whatever they studied as their profession, still studied mental philosophy may be told in three words—they sought completeness; they recognized the

obligation upon man to attain symmetry or completeness of growth and being.

There is no thinker but finds two great worlds, one without, the other within. I have had a child of eight years say to me, "Why, I cannot stop my thinking. I have tried to keep from thinking anything, and I cannot." Observations upon ourselves, as knowing, feeling and choosing subjects, are practised perhaps by every mortal.

But it is the very few who make scientific observations.

The immense majority accept at second-hand the names, the numbers, the classes, the characteristics of mental phenomena, as they do of physical phenomena.

If I were to ask twenty high-school students of mental philosophy how they knew they had presentative powers, nineteen of them would say, Because our book says so. I am not sure but it is better that nineteen out of every twenty *should* know the existence of lungs, stomach or presentative perception in this way, because the book says so. I do not believe that more than one in twenty is intended by his tastes or powers to become a scientific observer—taking facts at first hand largely, testing them, comparing, classifying, systematizing and naming them, and identifying them with the facts of other scientific observers.

The man who grinds scissors, perhaps grinds them as he does, and in no other way, because his father taught him that such was the way to grind scissors. This man may be permitted to accept that he has a soul because his mother told him he had. He is not born to be a student, nor expected to be one.

If there be any student of medicine who expects to build up his medical creed out of what the twenty professors of this faculty tell him, then he may build up his knowledge of the mind in the same way. But however excellent a memory he may have, and untiring industry, so that his knowledge may be proved prodigious, he will not be a man of science.

But whatever man has enough intellect scientifically to study medicine, has enough intellect scientifically to study psychology; and he will, I am sure, at one time and another, say, I ought to study it!

This is simply the recognition by a man that he is to employ his natural powers for the objects for which they were given him, in due proportion and relation: and that if he does so, he does right; if he does not, he does wrong.

This law of duty every man possesses by intuition. It is *the* moral law.

Obedience to this is happiness also. It is not seen or obeyed because of the happiness, but obeying it is happiness. It is the satisfaction and happiness that accompanies and flows from the harmonious perfecting of a man's powers, and from the possession of an unbounded and everlasting field of effort and investigation.

When I consider that psychology awakens the mind to its most vigorous exertion, because nothing can be done in it without exertion, and is therefore the best mental gymnasium, I cannot see how any one can neglect it.

Hence Edmund Burke says: "By turning the soul inward upon itself its forces are concentrated, and are fitted for greater and stronger flights of science; and in their pursuit, whether we take or whether we lose our game, the chase is certainly of service."

One of this Faculty of Medicine surprised me by his speech at the last dinner of the Alumni, asserting that there were no eminent practitioners of medicine in this city who had not received a liberal education. I took it in the sense that every one had taken a college course. If he had said that there was no eminent physician who had not, either in or out of college, become a thinker by both study of self in introspection and of the world by observation and by reasoning upon his studies, then I would have heard exactly what I had supposed to be the case.

[I had supposed there were some well-educated men in practice here who had become well educated outside of the walls of a college.]

But even if the study of the soul did not afford the higher mental training, it would offer the most satisfying field of knowledge. Though the traveller nowadays looks off Mount Washington or the Rigi railway without any muscular exertion, carried up by an inclined railroad, he enjoys none the less the grandest views imaginable.

So the study of the soul within, independent of the vigor derived from the study, is most satisfying. I would amend Pope's line,

"The proper study of mankind is man,"

by substituting for the rather tame word "proper" the word "noblest," and say: "The noblest study of mankind is man."

I am quite ready to say with Dr. Loomis that for a portion of mankind the proper study is pathological man; with Dr. W. H. Thomson, is neurological man; with Dr. Polk, is gynæcological man; with Dr. Stimson, is anatomical man; with Dr. Pardee, is otological man; with Dr. Witthaus, is chemically-compounded man; with Dr. William G. Thompson, is physiological man. But I think that they all will say with me, the noblest study of the whole of mankind is psychological man.

Apart from the study of the soul, there is no probability of any scientific investigator rising to the study of any intelligence higher than the soul. "The undevout astronomer is mad," is not half so forcible a saying as would be this: "The undevout psychologist is mad."

Only as a man knows himself an active subject and not a passive object in his intelligence, as a cause of his own activities, and as a free, that is, a self-determined and, in a certain sense, creative agent in each choice made between alternatives, does he have even a glimmer of a Supreme Intelligence, of a First Cause, of a "Power not ourselves, which makes for righteousness."

To me it is a notable fact that the great thinker in psychology, even though carefully educated by a father in agnosticism, as was John Stuart Mill, fails not to bring his readers to the question of a God. Those are very suggestive words of John Stuart Mill in his posthumous works, when he admits the great weight on the side of theism of the argument from adaptation, and further grants that theism once admitted, there is no real metaphysical or philosophical obstacle to the admission of the supernatural as asserted in Christianity. It becomes a mere question of credibility of testimony.

"Ad astra per aspera" was an ancient saying, which may be translated, "No excellence without great labor." A higher

truth is this: No real scientific knowledge that God is, or what He is, except to men who first know their own souls.

The great dearth of the Church to-day seems to be theologians who reach theology by the road of philosophy. Instead of them is a much smaller race, who purpose to reach theology through textual criticism only. Not so Augustine or Anselm. Nor do I believe that the man who instead of taking first his own experience, thought and constructive reason as a telescope for seeing the loftiest things, takes first and foremost a Hebrew and Greek lexicon, will ever reach the highest views.

Psychology, then, because self is so great a study; and if not content with self, then because the study of self leads up to the study of God.

The devoted student of the physical world especially needs mental science. The study of the facts of physical man involves a certain risk to the mind, namely, the risk of seeing and believing no laws save those of matter, and further of seeing and believing the existence of no essence except one, and that one matter. The student of chemistry resolves the numberless objects of the world about him into a few elements. He likes to think that these are but modifications of perhaps two or three elements, or even of a single element. Two thousand five hundred years ago one of the earliest analytical students of the world, Thales, of Western Asia, said that everything was a modification of water. His successors said air and fire as well as water. An eminent electrician of to-day maintains, I understand, that all life and force will one day be resolved into electricity.

A man does not need to be an advanced student in order to seek to reduce objects to a single class. The easiest way by which the mind can retain knowledge of several objects, for example, of a horse, a cow, a dog, a cat, is to reduce them to one conception—animal or quadruped. The artist who has studied womanly beauty in a thousand persons seeks to embody the beauty of all in a painting or statue, which he may call the Virgin Mother Mary, or Eve, or, if he be a pagan, Venus or Hebe. The artist seeks what he calls unity in his work; the poet seeks unity. It is simply because men love to know, to grasp,

to remember, and the mind cannot do so except by combining the many into the one. Nero, it is said, wished that the whole Roman people had one head, that he might strike it off at one blow. That same love of mastery, which in Nero was so cruel, inclines many a scientist to reduce all the objects of the universe into one homogeneous primal something, that he may easily grasp that something by his understanding. He finds the higher animals repetitions of the lower, and so on till he discovers all in certain hardly organized objects, differing from material objects only in that they live.

A kind of intellectual necessity impels to the reduction of the many to the one. Where a man will stop in his search for the ultimate depends a good deal upon his surroundings, habits of mind and feeling, and on his own choice. If Thales had not lived on the sea, he would not, I think, have supposed that everything had once been water.

The man that deals with mental phenomena is more likely to find that mind was first; he who deals with matter to resolve even mind into matter.

It would seem that so long as men did not enquire closely into the physical world, they accepted readily mind and matter without troubling themselves to resolve one into the other. But when they began to ask for a single original element, naturally they took that which they could most easily study.

It is a difficult thing to study soul. It requires the look to be turned inward, and when we look at the phenomena within we see them differing one from the other only in the time when they occur and in their inner quality, that inner quality being tested by nothing save consciousness.

But when we look outside the soul, at the phenomena of our own physiological life or of the lives of others, or at animals, plants, and at inorganic substances, we find them differing not only in the points of time when they come before us, but in form, weight, motion, color, and every attribute which may be tested by our five senses. No wonder that we are impressed by such objects.

It is immensely easier to interest the mind in what touches the five senses than in what touches only consciousness. We

are under the necessity, the first years of our lives, of occupying ourselves with observation of the outer world. The child sees and tastes, hears and touches and smells ; but it does not often take notice of its soul. Besides, nineteen men out of twenty make their living wholly by the use of their five senses and of their muscles, with very slight use of mental faculties. There is a more ready amusement and pleasure in dealing with objects of sense than with objects of consciousness. Not that the latter will not give pleasure, and the highest order of pleasure ; but it is not so quickly or so easily attained. The objects of study which allow results to be expressed by figures, or descriptions which address the eye, give to most minds a satisfaction very much like that which is given by vision itself.

The love of mastery impels to the choice of studies which lead to a complete mastery, as is supposed, of the problem at issue.

The mind that sets out to prove that the square of the hypothenuse of a right-angled triangle is equal to the sum of the squares of the other two sides, or to prove that lightning and electricity are identical, or that water = H_2O, attains a feeling of conquest of the problem, which was never got by Kant in his effort to show how the mind gained knowledge of space or time, or by Martineau, in his effort to show the number and rank of the primary impulses of our nature; or by Edwards, in his effort to show that a choice, though compelled by the stronger impulse. was yet free. I doubt if any one of the three was ever sure that he had mastered the problem.

The student of the external world finds so many problems that he can master that he easily forgets how many he cannot solve.

If I were seeking for the man who has the greatest conceit of his victories, I should select a baseball champion, or the man who has invented a car-coupler. He has won some definite mastery over forces, and is prouder than ever was Socrates, or Plato, or Sir Isaac Newton.

The last, indeed, won definite victories in the study of the external world ; but his was too great a mind not to see how few and small were his solutions in contrast with the still un-

solved and, as it seemed, insoluble problems—"I am a little child picking up pebbles from the ocean beach, but the unsounded depths of the ocean are still before me."

Whether the student of the external world is narrow in mind, or broad and intelligent, he is prone to look at matter only, or, if he study mind, to regard mind and matter as subject to similar laws and conditions, and alike yielding obedience to force, every instant and in every activity.

He is prone to think that as the light and heat and ashes from the grate are but the coal in a new form, so benevolence, or compassion, or hope, are results of pre-existing activities inevitably necessary, as the light and heat and ashes are necessities of combustion.

Free will, in the sense of self-determination, is denied, if, indeed, the soul itself is not denied.

A recent French thinker, Ribot, says that the great mistake till now has been that "the soul, instead of being considered simply as a logical subject, to which we attribute all the facts of internal experience as predicates, has become a real being, a substance!"

What but constant absorption in the five senses would lead a thinker to find earth, or air, or gold, any more *real* in being than soul, than the "Ego," the "I" which knows earth or air or gold, but as certainly known in the meantime *self!*

A physician who like Galen studies not only medicine but philosophy will stop short of materialistic dogmatisms. When Galen writes of the soul, he is not sure that we could exist without the body. "How," he asks, "could incorporeal substances be distinguished from each other? How can incorporeal substances be spread all over the body? How can such a nature be affected by the body, as is the case with the soul in madness and drunkenness?" Galen has not made up his mind upon the question.

Even Galen measured the value of every enquiry too largely by its utility in the popular sense of utility. Questions concerning the unity of the world, whether the world had or had not a beginning, or whether gods exist, are worthless in his view to practical philosophers. Galen, living in the days

of the infant beginnings of Christianity, said we must believe in a design in the universe and law, but need not know anything about the nature of any divine or superior being.

But while Galen stops short of materialistic dogmatism, every student who, instead of giving himself exclusively to the study of the material world, studies introspectively as well, will stop short in like manner.

He may be an agnostic like Herbert Spencer, but he will probably say, like Spencer, that if he must choose between believing that only matter really is, or only mind really is, he will assert the latter.

"Nevertheless, it may be as well," says Spencer, "to say, once for all, that were we compelled to choose between the alternatives of translating mental phenomena into physical phenomena, or of translating physical phenomena into mental phenomena, the latter alternative would seem to be the more acceptable of the two.

"We may go further towards conceiving units of external force to be identical with units of feeling than we can towards conceiving units of feeling to be identical with units of external force." (Psych. I., 158–160.)

Psychology and physiology are nearer neighbors to-day than ever before in the minds and studies of both physicians and metaphysicians.

Such writers as Carpenter and Bain, and Maudsley and Wundt, are of this generation.

Their great value is in their minute, scientific study of every physiological phenomenon that accompanies psychological experiences.

Their motto, over against the exclusive study of the soul through introspection, is expressed by Ribot thus: "It is worth more to solve small problems than to debate unceasingly great questions where solution is impossible."

I am not sure about this, if it means worth more to the individual growth. But I would say, rather, "This ought ye to have done, and not to leave the other undone."

The physiology of to-day makes a special study of phenomena accompanying the conscious experience of the soul. For

example, the memory is weakened ; what are the physiological accompaniments ? The power of language is weakened ; what are the physiological accompaniments ? The man is insane, the child is idiotic ; what is the matter with the brain ?

Do not these questions suggest that every student of the body needs to have an analysis of the soul vividly before him, such as is gained by his own introspection, or more readily by studying the text-books which sum up the best conclusions of men who have practised introspective study of themselves ?

I do not advise the giving of much time and energy to the ancient history of mental activities. Certain books upon evolution profess to tell how men grew to be what they are. Therefore I call them ancient histories of mental activities. Not only are they histories of events which are very ancient ; but, like the first chapters of most ancient histories, they are, for the most part, works of imagination.

When Diedrich Knickerbocker wrote "The History of New York," before reaching the solid subject of Hendrick Hudson's discovery and Wouter Von Twiller's golden reign, he spent several chapters upon "Cosmogony or Creation of the World," with a multitude of excellent theories by which the creation of a world is shown to be no such difficult matter as common folk would imagine.

I advise any one that reads Knickerbocker to skip these chapters and begin on the solid facts (if he can find them) ; and I do not ask any student who does not choose philosophy as his specialty to spend time in reading how our belief in time or space, or that A is either B or not B, grew up in human nature, or how thought grew out of memory and sense perceptions, and these out of sense impressions.

This is still very much like Knickerbocker's cosmogony.

What is worth knowing is what functions the soul exercises now, and what knowledge does every man have without going through a process to attain it ? What intuitions are ours !

The first and least attainment in psychology which every student should reach is a clear, ready, accurate analysis of all the activities of mind, arranging them in a system, with a fit name to every one of them, and a committing these to memory

after he has once accepted them, so that they shall be his to use readily forever after. This might be gained as early as the period of the high school. I am one of those who believe that a man gains by having been moved in some gentle way to commit when a child valuable forms of words, catechisms, orations of Webster, or poems of Milton, even without half understanding them. On this principle I am not sure but a psychological catechism should be prepared, and taught to every scholar of our public high schools. If introduced into our high schools it should be with care. A very serious charge is made by Dr. Ladd, of Yale, in a September magazine, against a certain city, that it pours Bain's psychology and ethics, undiluted, down the throats of its high-school scholars.

A sound psychology in our high schools is to be highly esteemed. But it is not half so important for our high school graduates as it is for students of medicine. You, gentlemen, must be students of the entirety of human nature. You must, then, know human nature.

If it be true, as one of this faculty said, "that no man will be accepted as a physician in this city who lacks a liberal education," it will soon be true in the length and breadth of the land, if indeed it is not true now, that no man will be eminently accepted as a physician of the body that does not have at least the elements of the *science of the soul.*

THE ARGUMENT FROM PROBABILITIES.

[Contributed to the American Institute of Christian Philosophy.]

By the Rev. J. Q. Adams, San Francisco, Cal.

"NATURAL science is certainty, religion is uncertainty. Demonstrate the being of God and the truth of Christianity and I will believe. Probable reasoning will not answer."

Much of the current infidelity of the present day is based upon assumptions like the above. In other words, it is assumed that in science, demonstration, in religion, probability, determines the conclusions, and because of this, one is credible, the other incredible. Demonstration is assumed to be the guide of life, and anything less than this to be unworthy the attention of intelligent men. It is often made to appear that business, law, medicine, geology, physiology, astronomy, and even the Darwinian theory, all rest upon mathematical axioms; that to question any of their conclusions or interpret differently any of the facts, shows foolish ignorance; while upon the Christian's faith is heaped much ridicule because apologists admit that its alleged truths are based, not upon demonstration, but upon probable reasoning. These conclusions, expressed or implied with wearisome repetition in current literature, are so unwarranted, yet deceive so many people, that it is not an unnecessary task to point out the errors in them.

I. Let us consider, then, what probable reasoning is, and what the rules of evidence are by which its conclusions must be tested.

1. Demonstration applies to that which is necessarily true. If the premises are true, and each step of the process logically taken, but one conclusion is possible. We cannot conceive of its opposite being true, or of the conclusion being false. Such reasoning rests upon self-evident propositions, in other words upon the deliverances of our consciousness. Pure mathematics

furnishes us, of course, with the illustrations of this kind of reasoning. Certain intuitive truths are stated as axioms; certain definitions universally accepted are given, and from these we draw our conclusions. If the steps be logically taken, the conclusions reached cannot be contradicted. Accepting the axioms and definitions of geometry, all the angles of a triangle *must* be equal to two right angles.

It is singular to note the attempts made to use this kind of reasoning where it is out of place. Take the famous words of Prof. Tyndall's Belfast address as an illustration, "By an intellectual necessity I cross the boundary of the experimental evidence" (what right has he to do this in matters where experiment and facts are the only tests of truth?) "and discern in that matter which we, in our ignorance of its latent powers, and, notwithstanding our professed reverence for its creator, have hitherto covered with opprobrium, the promise and potency of all terrestrial life." An intellectual necessity indeed! An attempt at mathematical reasoning! A figment of his own brain without one fact to support it and many against it!

2. Probable reasoning rests upon contingent truth. The opposite or negative is conceivable. The facts or truths may or may not be as stated. Until sufficient evidence is furnished, we can question, doubt, deny, without contradicting self-evident truth. Each fact must be established before any conclusion can be drawn from the whole body of facts. Then the value of the conclusion will depend upon the value, sufficiency of proof, and number of these facts, compared with those which tend to an opposite conclusion. The final result is a statement of the probabilities, after a careful weighing of all the facts on both sides. The strength of this conclusion will be determined by the combined strength of each separate fact. It is not a chain made up of links, so that the weakest link determines the strength of the chain, but a twisted cable whose strength is the combined strength of every strand.

3. There is no necessary difference in the value or moral certainty of the conclusions reached by these two processes. If in any given case it can be clearly shown that the balance of probabilities is on this side, it rightfully demands our assent and cor-

responding action. "The word probable," says Dugald Stewart, "does not (necessarily) imply any deficiency in the proof, but only marks the particular nature of that proof, as contradistinguished from another species of evidence. It is opposed not to what is certain, but to what admits of being demonstrated after the manner of mathematicians."

Probable reasoning varies in its conclusions from mere possibility to moral certainty. We believe that the sun will appear above our horizon at a certain hour to-morrow morning. Our belief is based upon probabilities, yet the conclusion is so certain that we have not a doubt about it. I believe that I shall go home to-morrow. My conclusion again is based upon probabilities. But it is much less certain than the other. Almost innumerable contingencies may change my plans. We know of but few that will affect the sunrising. Represent impossibility by zero, certainty by unity, probability may be represented by every fraction between the two.

4. But this distinction is largely a subjective one. Are we sure that this alleged truth or fact is really contingent? It lies beyond the range of our intuitions; we cannot demonstrate it; but is it, therefore, merely probable? May not our ignorance make that seem probable which to another wiser than we is certain? With greater knowledge will not contingency disappear from many places where it is now seen? As Mr. Gladstone says: "The whole notion of evidence seems to belong essentially to a being of limited powers. For no evidence can prove anything except what exists, and all that exists may be the object of direct perception. The necessity of reaching our end through the circuitous process implies our want of power to go straight to the mark." "Probable evidence," says Bishop Butler, "in its very nature, affords but an imperfect kind of information; *and is to be considered as relative only to beings of limited capacities.* For nothing which is the possible object of knowledge, whether past, present, or future, can be probable to an infinite intelligence; since it cannot but be discerned absolutely as it is in itself, certainly true, or certainly false. *But to us probability is the very guide of life.*"

5. Again, demonstration itself rests upon probable reasoning.

We must assume the veracity of consciousness. It is in the highest degree probable, else our axioms become vague uncertainties, but we cannot demonstrate its veracity. The fact itself must be assumed at the very outset of the attempt to prove it. The continuity of consciousness and our own identity are placed in the same category. They lie at the foundation of every demonstration. They are probabilities, moral certainties. Deny them, and even mathematics become a tangled skein of uncertainties.

6. The absolute, unquestioned conclusions of science are few. Herbert Spencer says: "Much of what we call science is not exact, and some of it, as physiology, can never become exact." Most of the statements which embody our present knowledge in physical science are statements of probabilities, not of absolute truths. They vary greatly in certainty and cannot be demonstrated. The atomic theory, for example, is a fundamental one in modern science. According to Prof. J. Clerk Maxwell, "about two millions of molecules of hydrogen in a row would occupy a millimetre (.03937 of an inch), and about two hundred million million million of them would weigh a milligramme" (.0154 of a grain). Who can demonstrate this? But according to many, it is reasonable, scientific, easy to believe in the atom which no eye hath seen, nor can ever hope to see, and whose very existence is argued from probabilities, while it is unreasonable, unscientific, difficult to believe in a personal God, the Maker of the atom and the Father of our spirits, because no eye hath seen Him and His existence is not mathematically demonstrated! Astronomy and geology will furnish abundance of further illustrations that probable reasoning prevails in modern science. Moreover it can easily be shown that it is not always demonstration in mathematics. Here also probability has its place.

7. It needs, also, to be remembered that demonstration is not relied on in practical life. Probability, even possibility, is the guide of action everywhere. A business man does not attempt to demonstrate the wisdom of a given course, and fool would he be if he did. He balances probabilities, he weighs the chances, and the probability that this is the right way decides him, if he be wise. He conquers success even when the probabilities seem to be against him. He believes with all his heart that he is in

the right way, though the probabilities are almost equally balanced. The result justifies him. The daily life of every one is illustrating these truths. What consistency is there, then, in insisting on demonstration in religion? The bare possibility that the Gospel is true ought to be a sufficient reason for careful investigation regarding it. A reasonable probability that it is true, and this at the lowest estimate its *intelligent* critics would admit, ought to lead every reasonable person to obey its precepts, to yield to its supreme Teacher the loving, loyal service of the life.

II. Let us now consider the rules by which probable evidence must be tested.

1. "The best evidence," says an able lawyer, "of which the subject admits, is all that is required in courts; and it is sufficient in matters of the highest concern, even in cases of life and death, that a fact be proved beyond a reasonable doubt." "The best evidence of which the subject admits"—in other words, demonstration cannot be required where, from the very necessities of the case, it cannot be given. "The test," says McCosh, "which settles one truth for us does not necessarily settle all others or any others." Each case must be judged by itself in view of its own peculiarities.

"Beyond a reasonable doubt." This is not a mere guess, nor, on the other hand, is it mere ability to question the evidence and show that there are difficulties in the way of the conclusion. Yet this often seems to be the assumption underlying much of the current criticism of religion. "A reasonable doubt," says Judge Moore of Brooklyn, in charging the jury in a murder trial, is "such a doubt as a reasonable man might entertain after a fair review and consideration of the evidence—a doubt for which some good reason, arising from the evidence, can be given."

2. Every fact in the collection from which the conclusion is drawn must be proved independently by direct evidence. In other words, the alleged *facts* must not be *inferences* from some other facts. It is a maxim in law that you cannot draw an inference from an inference. Surely scientific men ought not to object to this rule, for they believe, according to Prof. Huxley, "in

justification, not by faith, but by verification." There ought to be no "missing links" in their conclusions. Yet how frequently this rule is violated. "Too frequently," says Beale, "the assertions concerning so-called facts of science, after being carefully considered and examined, become resolved into the vaguest conjectures." Illustrations of this statement will occur to every reader. Conclusions are based upon collocations of facts and inferences from alleged facts, where the latter are in serious doubt. The "missing links" are missing facts. But the chasms are bridged by spider-web inferences, and the conclusions asserted as if they were necessary. Prof. Tyndall, for example, asserts that his evolution theory is "fact and history." But take a sample of his reasoning: "If to any one of us were given the privilege of looking back through the æons across which life has crept towards its present outcome, his vision would ultimately reach a point where the progenitors of this assembly could not be called human." Fact and history! What a fine example of "justification by verification"! of the absolute certainties of science!

3. The several facts, when proved, must be placed in their proper relations to each other in the group from which the conclusions are to be drawn. Another rule frequently violated. The alleged demonstrations of the Darwinian theory have failed again and again just here. Without questioning the facts, there has often been a failure to show that they had genetic connection, or were not perfectly consistent with some other theory. Undoubtedly evolution is a fact, but Darwin's, or Spencer's, or Huxley's, etc., *theory* of evolution is a theory still.

4. All the facts used in the proof must be consistent with the conclusion. It must give a reasonable explanation of them, or show that they do not contradict the conclusion drawn from them. The treatment Jesus Christ receives from many writers will illustrate the failure to apply this rule. He, alone of the sons of men, is mightily moving the hearts and lives of men, by unseen spiritual forces alone, eighteen centuries after He met a felon's death at the hand of His own nation. He Himself, with His perennial influence, is the supreme miracle of history. The theory that explains Him satisfactorily must account for this and other associated facts. By the application of this rule

many of the attempted explanations are found to be hopelessy empty.

5. The balance of probabilities must be with the conclusion. It cannot exclude the possibility of other conclusions, but it must have the strongest probabilities, in view of all the facts, in its favor. Says Prof. Tyndall in his Belfast address: "It is not to the point to say that the views of Lucretius and Bruno, of Darwin and Spencer, may be wrong. Here I should agree with you, deeming it indeed certain that these views will undergo modification." But it is precisely to the point to say that these views may be wrong, for it shows at once that this theory does not exclude the probability of another inference. We are not troubled, then, at the Professor's remark that in rejecting his statement of evolution we "purchase intellectual peace at the price of intellectual death."

A careful consideration of these rules and a practical application of them would do much to reform our thinking both in science and religion. It would show that much rubbish has accumulated during the centuries past, while, it is firmly believed, that it would set in clearer light and upon stronger foundations the great fundamentals of our faith. Surely Christianity does not fear the most thorough investigation. She demands nothing but loyalty to the truth, but she does demand this. Probe her to the bottom, but do not poison the probe before using it. Test her alleged facts, but do not deny one of her facts in order to reach a conclusion. Above all do not represent that probability relates only to her, while demonstration applies everywhere else, or that moral certainty is inadequate as the guide of life. Moreover we believe that the application of these rules to the evidences of Christianity would abundantly confirm the remark of Chief Justice Gibson: "Give Christianity a common law trial; submit the evidence *pro* and *con* to an impartial jury under the direction of a competent court, and the verdict will assuredly be in its favor."

"The firm foundation of God standeth."

IMMORTALITY.

[Contributed to the American Institute of Christian Philosophy.]

By Rev. H. G. Henderson, A.M., of Kentucky.

THE thought of immortality presses home upon us with greatest force, in our strongest moods of mind and healthiest conditions of body.

It is not in our weakest states, when crushed by disappointments or taxed by trials, that the soul feels the thrill of immortality most intensely, but in those seasons when the mind is most active and heart most affectionate, we feel the throb of an undying vitality as at no other time.

The doctrine of immortality we therefore see is not founded on sentiment, but grounded on reason. If only at those times when the soul was faint, the heart sick and the body weak, as a *dernier ressort*, men sought surcease of their ills in the persuasion of being happy when death should come and translate them into a better state of being, I should feel sceptical of the hope; but when poets, philosophers, and scholars in their most vigorous creative moods, at the graduation hours of their achievements, realize most emphatically their claims to another life for the perfection of their powers, I am persuaded the faith is more than a fancy.

Walk out alone some lovely night, when all is bright and still. Look up at the sky flowered with stars, keeping their immemorial vigils, and as with silent eloquence they voice their vesper lesson to the soul and cause a Sabbath of mysterious peace to steal over your being, tell me if you do not experience a strange sensation of franchisement and feel the glow of immortal fires kindling upon the altar of your soul.

The soul reads its manumission in the autograph of stars the Almighty has alphabeted on the scroll of the evening firmament. "Night unto night" utters its oracle of immortality to the soul. The star-graduated dial of the midnight heavens is

Nature's apologetics. Astronomy is fatal to atheism. Let us be catechetical a moment. Is the soul immortal? Make it an individual question and we reply affirmatively. We know it intuitively; conscience with unmistakable voice affirms it; our insatiate desires, irrepressible longings, quenchless aspirations oracularly say the soul cannot die, but shall live when thrones have crumbled, dynastics fallen, and sing its song of victory as it conquers the arch foe death and sweeps in triumph to its home above.

Considered universally and the answer is the same. All nations have believed it. The instinct of immortality is as old as time. The ancients regarded the butterfly and the phœnix as symbols of this truth. Poetry, philosophy, art, fiction and song have incarnated the idea and handed it down from age to age. It has given sweeter cadence to the world's music, more affluent imagery to its poetry, richer tone to its literature, stronger fibre to its philosophy and truer ideal to its art.

A life beyond the grave was imaged upon the retina of the soul's eye at creation, and from that momentous hour, adown the flying ages, in bursts of rapturous song, human lips have ever sung of rest and rejoicing, after the din of the strife and dust of the march were over.

Theism is older than atheism. Belief in God is prior to disbelief. Of rank atheism I cannot conceive, for it is impossible for me to imagine a being so soulless that every thought of God is dead and every hope of immortality hushed.

I grant you at times the voice asserting the posthumous existence of the soul has been stilled, the conviction of a future life almost smothered from the breast of humanity and the divine image nearly obliterated from the human soul, yet anon the bubbling words of hope have been heard in the land, the effaced likeness has been restored and the lamp of immortality relumed.

In the centre of every human soul there is photographed the image of God. The pernicious influences and antagonistic forces militating against man's spiritual life, have tended to blot out the divine likeness, but the indelible impress has never been so impaired that the omniscient eye could not discern the dim-drawn lines.

The deluded soul may persuade itself in its hours of mirth and madness, that the thought of immortality is the frenzied fancy of a distempered brain, but when conscience-stung and sick of the empty vanities of life's Circean round, it will "cry out for the living God." The threnody is the last octave on the gamut of the life's music of the atheist, while hope, sweet as the melody of dying cygnets, is the finale of the Christian's song.

Born on the morning of antiquity, the hope of immortality shall not die amidst the death throes of a dissolving world. Campbell's "Last man," gazing at the anarchic panorama of cosmic dissolution, in heroic apostrophe defies the scenic apocalypse.

> "Go, tell the night that hides thy face,
> Thou saw'st the last of Adam's race
> On earth's sepulchral clod,
> The darkening universe defy
> To quench his immortality,
> Or shake his trust in God!"

The first man amidst the pristine beauties of Eden felt its heaven-born throb, and the last man amidst the final fires of this doomed cosmos shall own its sacred thrill.

The limit of this paper will only permit a brief consideration of the four proofs of immortality.

(1.) The *birth* of a human being suggests his future existence. The natal hints at a posthumous state of being are worthy of careful consideration.

A few summers ago, while out among the bees, I pricked the cap of a waxen egg-cell, in which was imprisoned a bee. Out came the prisoner and with no guide but instinct, made its way to that part of the hive where the uncovered cells were located, and from a tiny fountain of honey satisfied its appetite.

With studious curiosity I watched its untaught movements from the moment I liberated it from its cellular prison, until I saw it pause on the edge of a hexagonal reservoir to sip the treasured nectar.

With what pedestrian skill its untrained feet bore it along towards the goal of its wants; not the least puzzled in its undisciplined movements among the army of industrious bees; halting only when the coveted elixir repositories were reached.

There was only one conclusion to be drawn from the observations my eyes witnessed in this case of the bee, namely, "The bee comes into the world, thoroughly equipped for entering immediately upon the activities of its short existence."

So the chicken when freed from its shell will at once instinctively run after the fly for food, and avoid the wasp as an enemy.

The child, on the other hand, when born is totally ignorant and utterly helpless. Its mind is blank as the unwritten page. Intuition and reason alike seem wanting. Its lips must be guided to the breast by a mother's provident hand. The sparkling eyes and glossy skin of the poisonous snake fascinate it, while it will pass unnoticed the dull color of the harmless toad.

Now I hold that of all creatures in the animal kingdom the human child is born under seemingly the greatest disadvantages. The bee and the chicken enter upon their respective existences plenarily panoplied for the exigencies of their brief being, while the baby is born entirely unequipped for life's emergencies.

The ephemeron, born in the warm glow of to-day's sun, dying in the unfriendly chill of twilight's dew and damp, spends its few hours of being in perfect existence. Its life is the beatitude of an hour. All the joy God has for it is crowded into its few moments of being. An eternity of delight pressed into its little hour of merriment. It levies a tax on all the future, and its lawful revenue is the usufruct of a single hour's enjoyment.

It is not so with man; his joys are limited, his knowledge circumscribed and his returns are the tithes of time, and not the fruitions of the future.

To the ephemeron a sunbeam is peopled with countless motes, to the insect a leaf is a world teeming with myriad inhabitants, to the animalculum a drop of water is an ocean alive with numberless infinitesimal forms, to man the world is a sphere filled with millions of human beings. Mark the stupendous differentiation in the analogy, viz.: when the sunbeam fades, the ephemera perish, when the leaf withers the insects die, when the bubble bursts the animalcula are destroyed, but man shall survive the

"Wrecks of matter and the crash of worlds."

Lower animals, as we have seen, come upon life's arena ready

for the race, for it will soon be over with them; but man, the highest and noblest creation of God's hand, enters upon an immortal career; eternity is before him, so the Creator has wisely arranged it that all man has must be acquired. Toil is the talisman of his triumphs. With cherubic ken the soul shall ever urge its quest after knowledge, so long as eternity withholds a secret. Man's curriculum embraces the lessons of time and eternity. Doing and destiny are coeternal. Man and monad are two orders. The psychic and protoplasmic are differentiated. Their respective *regimes* are unique.

(2.) Likewise the *death* of a human being argues a future state with a degree of certainty that cannot be ignored in our efforts to firmly build our hope of another life upon a solid foundation.

(*a.*) The death of a child tells us there must be a future for it, or else its life is like the unfinished potter's vessel, rudely broken by a foe.

Cicero is reported to have said, "The next best thing to never being born is, to die as soon as one is born." The pagan orator was not wrong, if this world ends all, for life's compensations are not tantamount to the struggle for existence; and yet upon the ground of death being the last of human activity, the decease of a child is a meaningless incident, a mocking caprice, and we cannot but feel its mission in this world was a failure, being utterly extinguished by death. Its early death therefore is only compatible with the fact of another state of being, where the unfinished life can be more perfectly carried out.

(*b.*) The middle-aged man, who is just beginning to live comfortably, and to see his labors prosper, and to feel at ease with his environment, is often smitten down when life seems most desirable and himself most useful to his fellow-men.

If there is no life to come for this man, we can only compare his apparently untimely death (to hold to our figure) to the earthen vessel, dropped accidentally from the potter's hand when he was most admiring it.

In Tennyson's "In Memoriam," which is a monumental poem, in honor of the gifted son of Hallam the historian, the question,

"Why was the talented young Hallam in the prime and vigor of life cut down?" is the text upon which the poem is the comment.

We have frequently noticed the early death of some of the most brilliant men of earth, those favored beings we sometimes call geniuses.

Life instead of being a "survival of the fittest" seems a "survival of the unfittest." It almost appears a discredit to live when we see how many good and noble and great die young and observe the number of weak and worthless and ill that live long. Longevity may become a stigma. Death harvests precocious fruit early.

> "The good die first;
> And they whose hearts are dry as summer dust,
> Burn to the socket."

The legitimate conclusion from this phase of things is, there must be a larger sphere of being, for the fuller exercise of one's faculties, than this world grants to many of her children.

(*c.*) The death of the aged man points to the beyond. If when his days of life are over there is nothing better for him than the earthworm and the grave, then his demise is akin to the time-worn vessel of the potter cast aside in the *debris*. He is a shattered urn, a broken vase.

On the hypothesis that there is nothing after death, what is meant for the climax of life, I mean its close, is its anticlimax, and long before men reach the goal and gain the victor's garland, their superannuated gait grows so slow that fleeter feet outtravel, and instead of ending in splendid triumph the stadium of life's race, the veteran closes time's contest untrophied and uncrowned.

(3.) Thought is a proof of immortality. Our consciousness of intense mental activity produces the deep conviction of the perpetuation of this mind energy. Mind and body are individuated. The physical the vehicle of the psychical.

The activity of the brain, the continual reachings of the mental antennæ after the intangible, the mind struggling towards the unattained, and its constant craving for something more perfect, argue the post-mortem existence of this mental energy. Our

best productions satisfy us. We live in constant expectancy of doing something better than our hitherto best performance.

We feel there is a fountain of our being that has not yet started, a hidden spring not yet touched, a chamber whose mystic portals have not yet been opened.

We have not found the plectrum to evoke the secret strains of the enchanted chord. We are not skilled in the art of life's necromancy. Life's chain is not concatenated, its movements not articulated. We are more daft than deft. All die unsatisfied.

The dying general would like to command his men once more and lead them to greater victory; the expiring poet craves yet again to give vent to the pent-up fires of poesy that burn within his bosom; the sculptor standing amidst the beautiful statuary of his own skill, never feels that he has awakened from the unchiselled rock the archangel of his dreams; the artist sighs as he gazes upon the masterpieces of his own hands, feeling they lack a defter stroke than his brush has given and a diviner shade than his pencil has traced. Every tint is a crystallized tear of disappointment.

We are told by Pliny that when Zeuxis painted the picture of a boy holding a dish of grapes, which was so perfect as to deceive the birds of the air that flew down and picked them, the great artist was displeased with the seemingly faultless execution saying, "Had I painted the boy as well as I should, the birds would have been afraid to have approached him."

Gustave Dore, at the touch of whose genius kaleidoscopic variety and prodigal wealth of pictures sprung into existence, lamented at death his entire lack of originality, having been merely a copyist, and died in disappointment.

There is an indefinable want about all we do, a something that savors of incompleteness, a subtle intangibleness, that cannot be expressed in the forms that fancy feels. We are whelmed by the mysterious. We walk blindly in a temple. Our dream is not yet broken. Days pass to weeks and weeks to months and months to years too soon. The propinquity of the cradle and the grave is patent and painful. The symbol of our highest performance should be an unfinished column; the workman dead at its base, chisel loosely clasped in the hand that shall ply it no more.

We build upon a large foundation and dying leave the superstructure incomplete; we feel, however, the work shall go on in another realm of being.

We instinctively recoil from thinking the tomb the terminus of our endeavor. The wish for an immortal existence is irrepressible. This star enkindles the gloom of the grave. This longing for a higher sphere of activity, this craving to live eterrnally seems a pledge of immortality. This appetite must be satisfied. Its insatiability is the tenure of its existence.

Emerson says, "The implanting of a desire indicates that the gratification of that desire is in the constitution of the creature that feels it; the wish for food, the wish for motion, the wish for sleep, for socie y, for knowledge are not random whims, but grounded in the structure of the creature and meant to be satisfied by food, by motion, by sleep, by society, by knowledge. If there is the desire to live in a larger sphere, with more knowledge and power, it is because life and knowledge and power are good for us and we are the natural depositaries of these gifts."

I repeat it, the nature of thought, the actions of the intellect force the conclusion of a future life upon us. There is a better theatre for the exercise of man's powers. The curtain drops on life's play before the act is ended, not however before we catch the cue to the next scene. Thought gives the catch word.

(4.) Love is a postulate of futurity. The activity of the heart, its intense yearnings, its tender affections, its warm emotions affirm the indestructibleness of the links of love that leash us. Love is an indissoluble chain that binds heart to heart with golden clasp. To love is to live. The heart's miracle is affection. Love is the prophet of the heart. A man feels his immortality most potently, when he loves most ardently. A strong, deep love causes one to look beyond the night of separation to the day of reunion. Love is the bow of promise that arches the tomb, the power that breaks the seal of the sepulchre. The torch of love is in the hand of love.

I might be able to persuade you by the data of the sceptic, that you are only a worm of the dust destined to death and decay, yet when you look into the face of a dying father, mother, husband, wife, brother, sister, child or dear friend, there is a per-

suasion, so sweet and strong, that we dignify it into a hope, that you shall meet them again, that you forget the sceptical dicta in the spontaneous flow of the heart's affection for the dying.

This thought is beautifully brought out in the Greek tragedy, where Clemanthe asks Ion, when about to be a sacrifice to fate, "And shall we never see each other?" and the death devoted pagan eloquently answers,

"Yes!
I have asked that dreadful question of the hills,
That look eternal; of the flowing streams,
That lucid flow forever; of the stars,
Amid whose fields of azure my raised spirit
Hath trod in glory; all were dumb; but now,
While I thus gaze upon thy living face,
I feel the love that kindles through its beauty
Can never wholly perish; *we shall meet*
Again, Clemanthe!"

THE INSTITUTE'S ENDOWMENT.

By Rev. Dr. Deems.

IN No. 2 of the current volume, in extracts from the President's Anniversary Address, there was a statement made (p. 117) of a proposal to complete an endowment for the Institute. This is most desirable. Members are frequently in arrears for their fees, but the bills for printing and postage go on. The Institute is still dependent upon invitations and personal pledges in order to hold summer schools. If the officers depended upon membership fees they could never be sure of a continuance of their work. They could if *every* member would remit within a month of receiving his bill, and very many do, to the great comfort of the officers; but many very estimable and distinguished gentlemen have been so engaged with other matters as to let their membership fees run several years unpaid. They *will* finally pay, of course, because they are gentlemen and Christians, but while the Institute waits for them, the bills for printing CHRISTIAN THOUGHT and for other necessary expenses must be paid by somebody, and the expenses are increased by the clerical work and postage created by this delay. This precludes the officers from extending the work of the Institute.

We must, then, have a *certain* income to insure a perpetuation and enlargement of our influence.

Two thousand dollars had been secured and invested before the summer school of 1889. Then came the offer of $5,000, conditioned upon obtaining pledges for $15,000 more. Then the extracts from the Address, as published in our late number, were sent forth to every member of the Institute. Up to this writing, Nov. 18th, the following responses have been made, viz.: Hon. Thomas F. Bayard, Delaware, $100; Mrs. Caroline C. Bishop, Morristown, N. J., $100; Mr. D. Stuart Dodge, $100; Mr. Charles L. Colby, $100; Mr. Charles D. Kellogg, $10; Mr. Wm. A. McDowell, $10; Rev. Alex. Mackay-Smith, S.T.D., etc., $100; Gen. O. O. Howard, $100; Rev. James F. Riggs, Bergen Point, N. J., $10; Dr. Richard Owen, New Harmony, Ind., $10; J. M. P. Otts, D.D., Greensboro, Ala., $100; Mrs. Elizabeth H. Van Antwerp, $10; Mr. W. Ballantyne Patterson, San Antonio, Texas, $25; Wendell Prime, D.D., $25—all of New York, except where other residence is designated. In all to date from former members, $800. Very few have returned the blanks sent. This is encouraging, as 400 members are still to be heard from. Perhaps they intend to connect this blessed work with the celebration of the birth of Him for whose glory alone the Institute exists. Christmas, perhaps, may be made a very blessed day for the Institute.

Then to a number of gentlemen we have just sent a circular, soliciting them to become Endowment Life Members. There has scarcely been time for reply. Before those were mailed, Charles R. Otis, Esq., of Yonkers, N. Y., and Hon. J. G. Fair, of San Francisco, sent each $100. They did this because each had the subject presented to him by a member of the Institute.

It will be seen that we thus have $1,000 of the $15,000 secured.

Be pleased to notice the following suggestions:

1. Let each member of the Institute secure $100 from the congregation in which he worships to make his pastor an Endowment Life Member. Many a pastor would be delighted by being thus honored, and be greatly profited by receiving our publications free of expense to himself. Many desire the Lectures and Papers, but are unable to keep their membership.

2. Let us have lectureships named for each of the colleges. Of whatever college he is a member let the reader of this paragraph take the matter in hand, and go to work to secure $1,000 from the alumni of his college to name a lectureship. We shall then have the "Columbia College Lectureship," the "University of Virginia Lectureship," the "Princeton Lectureship," etc., etc. It is believed that this could be achieved with very little outlay of effort.

The Institute belongs as much to each member as to each officer. This precludes the president from any exhibition of urgency which could be construed into the appearance of his having more zeal for the Institute than the other gentlemen who constitute its membership.

MONTHLY MEETINGS.

By the Secretary.

October.—The Institute held its first monthly meeting of the season Thursday evening, Oct. 6th, 1889, in the Chapel of the University of the City of New York, with the President, Charles F. Deems, D.D., in the chair. The devotional exercises were led by Rev. Wm. Kelley, D.D., of St. John's Church, Brooklyn. The minutes of the last monthly meeting were read and approved. The Secretary read the following names of new members:

James E. C. Sawyer, D.D., Pittsfield, Mass.; Rev. Thomas E. Davies, A.M., Seymour, Conn.; Rev. Kenneth F. Junor, M.D., New York City; John Edgar, Ph.D., President Wilson Female College, Chambersburg, Pa.; Joseph T. Smith, D.D., LL.D., Baltimore, Md.; Scott F. Hershey, Ph.D., Washington, D.C.; Peter Stryker, D.D., Minneapolis, Minn.; Mrs. Emily L. Linnard, Philadelphia, Pa.; Charles R. Otis, Esq., Yonkers, N. Y.; Samuel W. Boardman, D.D., President of Maryville College, Tenn.; Rev. J. B. McGeorge, New York City; J. Allen, Ph.D., D.D., President Alfred University, Alfred Centre, N. Y.; Miss Louise P. Mellor, Pittsburgh, Pa.; Miss Jane M. Bancroft, Ph.D., New York City; Mrs. Isabella Knapp, New York City; Rev. Aaron Lloyd, Belleville, N. J.; Jacob B. Eckfeldt, U. S. Mint, Philadelphia, Pa.; Rev. John Wilson, A.M., Ph.D., Ocean Grove, N. J.; Edward Batchelor, Esq., Philadelphia, Pa.; William A. Duncan, Ph.D., Syracuse, N. Y.; Prof. Clarence U. Carruth, A.B., Highland University, Kansas; Prof. Stephen Yerkes, D.D., Dan-

ville, Ky.; Prof. James C. Quinn, Ph.D., A.M., National University, Chicago, Ill.; Rev. James D. Gold, M.A., Ph.D., Gibson City, Ill.; James E. Rhoads, M.D., President of Bryn Mawr College, Pa.; David C. Ridgway, A.M., D.D., Peabody, Kan.; Rev. Russell H. Conwell, President of Temple College, Philadelphia, Pa.; Joseph Cummings, D.D., LL.D., President of Northwestern University, Illinois.

The President gave a brief account of the highly successful summer school held at Key East, N. J., in July, and announced that the Institute had accepted an invitation from the officers of the Young Men's Christian Association of New York City to hold its monthly meetings hereafter in the lecture-room of the association. It is earnestly hoped that this movement will be profitable to both institutions.

The regular paper of the evening was by Rev. William Ainley, of Canning, Nova Scotia, whose subject was "The Church, the Pulpit and Modern Doubt." The subject and paper were discussed by Rev. Dr. B. B. Tyler, of New York City; Mr. N. S. Wilder, Mr. Stanley Hunter, of England; Mr. J. C. Cannaday, of Texas, and the President.

On motion by Vice-Chancellor MacCracken, seconded by Dr. Tyler, it was

Resolved, That the thanks of the Institute are hereby presented to Rev. Wm. Ainley for his able and timely address, and that a copy be requested for publication in CHRISTIAN THOUGHT.

BOUND VOLUMES FOR COLLEGES.—In No. 2 of this volume the announcement was made that $500 had been placed in the hands of the president to furnish full sets of the bound volumes of CHRISTIAN THOUGHT to such colleges as should apply for them. The announcement was made in other periodicals also. It is gratifying to say that the whole amount was speedily taken up. Six portly octavo volumes cannot be reduplicated frequently for $500. The distribution was made as the applications came in, and now at this writing we have more than a score of applications which we cannot supply. What shall we do with them? Who will give us another $500 or $100 to make this benefaction to colleges? No other six volumes could be given to any institution which would be of more value or probably more appreciated. We hope to be able to send to all the disappointed applicants a proposition to furnish their colleges with sets of CHRISTIAN THOUGHT at reduced terms. Cannot each college find a benefactor who will confer this favor upon them?

The colleges supplied are: Arkansas College, Arkansas; Alfred University, New York; Baker University, Kansas; Buck-

nell University, Pennsylvania; Christian College, Kentucky; Central University, Kentucky; Danville Theological Seminary, Kentucky; Drew Theological Seminary, New Jersey; Dickinson College, Pennsylvania; Dartmouth College, New Hampshire; Drake University, Iowa; DePauw University, Indiana; Earlham College, Indiana; Fishburne School, Virginia; Franklin College, Indiana; Findlay College, Ohio; General Theological Seminary, New York City; Greensboro Female College, North Carolina; Howard University, District of Columbia; Hiram College, Ohio; Hamilton College, New York; Illinois Wesleyan University, Illinois; Iowa University, Iowa; Jamestown College, Dakota; Middlebury College, Vermont; Mr. Moody's School, Massachusetts; Maryville College, Tennessee; McGill University, Canada; Mt. Allison Ladies' College, New Brunswick; Nashville Female College, Tennessee; Nashotah House, Wisconsin; Potter College, Kentucky; Reformed Episcopal Theological Seminary, Pennsylvania; St. Stephen's College, New York; State University, Ohio; Syracuse University, New York; University of the City of New York, New York; University of Indiana, Indiana; University of Vermont, Vermont; University of Virginia, Virginia; Webb School, Tennessee; Wilson College for Women, Pennsylvania; Wofford College, South Carolina; in all forty-three. These have all been sent by express and the Institute has the receipts. As several of the colleges have made no acknowledgment, it is now requested that all who are concerned examine the list above, and report any mistakes to Rev. Dr. Deems, 4 Winthrop Place, New York.

ABOUT BOOKS.

[In this department we shall make mention of recent publications, especially those in the line of our studies. There will not be space for extended review. The name of the book, its publisher and its price when known, together with a brief statement of its drift, will probably meet the demands of our readers. Any book mentioned will be sent post-paid, on receipt of price, by WILBUR B. KETCHAM, Publisher and Bookseller, 13 Cooper Union, New York.]

"INGERSOLL AND THE DEIST," by a native "Tar Heel." (For sale by Doane Herring, Wilson, N. C.) This is the title which seems to cover with obscurity and consign to oblivion a book which could not be produced by any ordinary thinker. No man who thinks assigns the least importance to Col. Ingersoll's balderdash, except for the influence which the brilliant style gives it over masses of unthinking youngsters and weaklings. We have never discovered anything he has said which can have any adverse influence over any mind that thinks. Of course, Col. Ingersoll does not believe what he spouts; there is no evi-

dence that he does any more than that any intelligent clown or clever actor believes what he declaims. He delights in the excitement of public speech and in the money he can make by using his wits as he does. It is a much more delightful way of acquiring funds than by the plodding practice of law. He believes that "the majority of men love to be cheated, and will pay handsomely for the service." He is willing to render the service for the pay. It does him gross injustice to suppose that he believes any of his teachings about the "Mistakes of Moses," teachings which he could refute, as any much less able lawyer can refute, in half the time he spends in stating them. But because of the populace, who, in his opinion, love to be cheated, are affected by the Colonel's harangues, it may be well to publish refutations of them, if you can induce those who are captivated by Col. Ingersoll to read what contains thought. Nothing written in answer to him seems comparable to this little North Carolina *brochure* for apprehension of the points and their logical destruction. The author, who, as we happen to know, is a born sceptic, represents an old North Carolina schoolmaster and Col. Ingersoll as coming together in a railway car and pursuing a discussion founded on the Colonel's reply to Rev. Dr. Field in the *North American Review*. The refutation of the Colonel's ideas is not made after the manner of a theologian. The old schoolmaster was simply a deist. The portraiture is from life. We knew the man who sits for the picture. His name was John G. Elliott, of Duplin Co., N. C. He graduated at the University of North Carolina, in the class of President Polk. The author of the book must have been his pupil. He reproduces his modes of reasoning vividly. He is the person described in the chapter on "Unchallenged Speakers" in "Chips and Chunks" (p. 539). We wish we knew how to give this book an immense circulation. Although not written from the Christian stand-point, it would accomplish much good.

"IS RELIGION DYING?" This is the title of a volume of 132 pages from the pen of W. H. Platt, D.D., LL.D. (Washington: W. H. Morrison.) The sub-title is "A Symposium: an Hour with the Philosophers." The learned and able author conceived the idea of making well-known thinkers meet at an imaginary breakfast in the library of a literary gentleman who should direct the supposed conversation. The idea is well carried out. The conversation is made up of extracts from the books of the speakers, and these extracts are made verbatim. The volume thus becomes valuable as a magazine of modern thought upon the subject discussed. There are more than forty thinkers quoted,

among them Spencer, Macauley, Frothingham, Draper, Blackie, Tyndall, Huxley, Virchow, Mill, Hallam, Fred. Harrison, Comte, Lord Selborne, Sir William Jones, John Locke, Rousseau, Martineau, Sir James Stephen, and others. The book would be greatly increased in usefulness by an index of the authors, so that the reader could quickly turn to any one whose opinions he wished to review. We have regarded the volume so valuable that we have made an index for our copy.

"MODERN SCIENCE IN BIBLE LANDS" is the title of Sir William Dawson's latest work. To our readers the name of the author is a sufficient indorsement of the high value of the book itself. He is an unquestionable authority in the subject upon which he writes. The book will be read by scientific men, by clergymen, and by all who desire to know the Bible more thoroughly. He brings scientific skill to the investigation of such questions as the site of Eden, the crossing of the Red Sea, the eruption at Sinai, etc. It is a work of over 600 pages, with many illustrations, which add greatly to its value. The members of the Institute will find a presentation copy of the author in our library.

"THE STORY OF JESUS" (large 12mo, cloth, illustrated, pp. 542) is a useful and interesting book. Its author, Rev. Dr. Richard B. Cook, does not attempt to make a work that shall supersede the large and critical lives of Christ by such men as Edersheim, Geikie, Farrar, and others. Gathering good things from such works, he presents the public with a popularly written book, well composed, well arranged, and embellished tastefully with many illustrations. The index and gospel harmony at the end of the volume add to its value. We heartily commend to the Sabbath-schools and the homes of our land "The Story of Jesus."

"THE LORD'S SUPPER" is the title of a handsome octavo of nearly 500 pages, compiled and edited by John L. Brant, and published in Cincinnati by the Standard Publishing Co. It contains extracts from the writings of nearly two hundred and fifty authors, apparently on every conceivable phase of the Lord's Supper. It will be a thesaurus for clergymen; and very many of the articles would be very good reading for communicants, preparatory to going to the Holy Supper.

CHRISTIAN THOUGHT.

THE SERVICE OF FREE-THOUGHT TO CHRISTIANITY.

BY REV. E. A. STAFFORD, D.D., LL.D.

THIS paper is based upon the strongest possible denial of the right of atheists and infidels to use the expression "free-thought" as in any peculiar sense descriptive of themselves.

What is free-thought? The expression is used here in its broadest sense, and describes the thinkings, the investigations, the researches of the human mind after it was emancipated from bondage under the authority of the Church.

We turn back to that period of history when the functions of reason, as well as those of faith, began to be recognized in the service of religion. Earlier times had honored nothing but the capacity to believe, irrespective of the character of what was believed. Virtue was measured by credulity, as is illustrated in Tertullian's immortal saying, "*Credo quia absurdum est*," which is a characteristic of the time. Religion was then an easy study, and its practice scarcely more difficult, for no troublesome questions about doctrine ever intruded upon private life, and no thinking was necessary, except to a few who stood in the centre, high uplifted above all criticism.

But in due time the human intellect began to demonstrate the reason of its existence, and to demand that it be fully recognized as the handmaid of faith, in the same field. Removed from Tertullian by nearly a millennium of years we find the name of Anselm at the beginning of a new epoch, and the spirit of his age crystallized in his words, "*Credo ut intelligam.*" He strove to vindicate the claims of reason by bringing the light of Aris-

totle's logic and philosophy to the fuller illumination of theological dogma.

From this plan of interpretation sprang the abounding stream of scholasticism dominating human thought for centuries. But during all this long and weary period the creeds of earlier ages continued to be accepted as infallibly true. Every system of scholastic philosophy is based upon this presupposition. Hence all original enquiry was checked by the supposed divine authority of what the Church had already declared, and any bold excursionist in thought who dared to venture beyond the limitations thus set up was denounced by the Church as an infidel or an atheist, and speedily visited with the severest pains and penalties, including death, often reached through paths of harrowing violence, and worse by fathomless miseries threatened for the future.

Now under these conditions thought could not be free, for all aspirations after intellectual growth and progress were stamped with the guilt of disobedience and unbelief, for which there was no spirit of toleration.

But, like all the great movements in the progress of civilization, scholasticism ran its course, reached its culmination, and its own weakness, inevitable under the circumstances, led it out of the way. Other concurring causes, as the increased attention to the Greek learning, opened wide a door through which more complete intellectual freedom entered. Then, in its resistless energies, the human mind came out of bondage in the alien region of authority, and asserted its supreme right to traverse and subdue all worlds. Obedience—the third vow of the Church—was dissolved, so far as thought, investigation, enquiry, research, the pursuit of knowledge in all possible ways, was concerned. In the company, or close upon the steps of Campanella, who was imprisoned and put upon the rack for asserting that God had revealed Himself in nature as well as in the Bible, and of Bruno, who was exiled, and afterwards imprisoned and burned under the authority of the terrible inquisition, came along in a stately procession the great figures of Des Carte, Spinoza, Locke, Leibnitz, Newton, Montaigne, and Kant, defining new paths in all directions, especially turning their attention to the teachings of nature, developing correct conceptions of man himself, his relations to

his surroundings, and particularly his relation to other men in the structure of the state.

The new principle introduced simply changes the "Credo" of Anselm into the "Dubito" of Des Carte, and we read *dubito ut intelligam*, and welcome into the light the fact that great doubting lies along the path to great certainties. Des Carte's life and work affirmed and illustrated this truth as a fundamental principle, and its enunciation dated an epoch in human progress, and enthroned its author as the founder of modern philosophy. This principle is really the charter of emancipation to the human intellect, and it is the guiding light of free-thought.

Now the great historians of man's mental progress make this point the dividing line between the epochs of ancient and modern philosophy, so that the whole of modern philosophy is free-thought, in the widest, truest sense of the word. So it is understood in this paper.

But this freedom, no more than any other good thing, has been entirely free from abuses. Released from fear of the penalties of the Church, in which it was a long and slow process to learn to deny that any divine displeasure dwelt, and a doubt no longer regarded as a crime, and the one thing whose sinfulness divine mercy could not reach, from unquestioning faith many ran to the opposite extreme; and some, through a constitutional necessity, but others, through positive hatred of the truth, denied everything, without discrimination, which faith accepted. With them the crown and pride of reason was to avenge itself upon faith by trampling upon it and rejecting it altogether, even as faith had before attempted to extinguish reason; and so reason became as unreasonable as Tertullian's faith had been. From believing what was absurd, men were turned by reason in the opposite direction, and they rejected what was not absurd, but very reasonable, and in consequence skepticism, infidelity, atheism, and agnosticism appeared as the natural products of free-thought. From an obedience that was intellectual slavery the pendulum swung over to a liberty that was despair.

By a mental process which knows no rule, led by this fact, it has become the habit of literature to speak of free-thought as synonymous with skepticism and infidelity.

Now this is convenient, but it is unhistorical, and unphilosophical, and the classification is too narrow for fairness. By it some of the truest and profoundest thinkers of the Christian Church are stamped as, at least in one particular, inferior in comparison with the so-called free-thinkers. Any just classification will include among free-thinkers many earnest Christian philosophers since the Reformation. There is a long list of students in language, archaeology, and exposition, as well as a multitude who have wrestled with the most difficult mental problems, and others who have turned new leaves in the great book of nature, and have helped to train the wild jade evolution into obedience to the supreme Deity, as one of His servants, all of whom have pursued their work in perfect indifference to any ecclesiastical penalty, if the tempting boldness of new revealed truths should lead them past limits previously defined by the Church.

Free-thought ought not then to be arraigned indiscriminately as engaged in a bitter dispute with divine revelation, hating and trying to destroy its authority; but it honestly asks only to know the real meaning of that revelation, as well as rightly to understand the voice of nature in man and his surroundings, and it is the reliable weapon of all who truly revere the name of God, who believe that He has given a revelation to men, and who acknowledge allegiance to righteousness, truth and goodness.

Now what the opening of this epoch of free-thought has been to the intellectual development of mankind is attested by countless monuments. At present we are concerned only with the service it has rendered to Christianity itself. This service does not consist so much in results fully accomplished, as in tendencies which indicate the type of Christianity in the future.

I. We place in the front the leading of the Christian Church back to the Bible as the only true authority on all religious questions.

The great doctrinal system of Christianity had been developed by the individual influence of the fathers, supplemented by the deliberations of councils, and then by the authority of the hierarchy thereof, and these doctrines had been explained and expanded by the schoolmen through so many centuries that they had come to be regarded as a complete structure. Men thought

they were finished forever. There would never be any call to amend them. Approved as they were by the voice of the whole Church they spake with authority. There was no necessity to go behind them. For ages it was the crime of damnable heresy to admit even in thought that they were wanting in any respect, or were not absolutely perfect. What need could there be of any fuller instruction? What use remained for the Scriptures? Athanasius and Augustine had become larger figures than Paul and Peter. Anselm and Aquinas were more quoted as authority than Jesus and John.

Now the spell of an influence so strong was not easily broken. The Church left to itself would never have cast it off. It required just such blows from without as atheism and infidelity, inspired by vehement hatred, were perhaps alone able to inflict. This violence produced better results than it intended, and the interpretation of Christianity was at once lifted upon a higher plane when men were enabled to realize that good and wise and great as were these worthies of a bygone age, who had reduced the teachings of Christianity to systematic form, to their work nevertheless belonged the divine right of being criticised; and there was really no sacred obligation resting upon future ages to accept their conclusions as either exhaustive or final, and that while the world still held in possession all the original authorities by which they were guided, other men, not inferior in goodness and wisdom might go back to those sources, and examine for themselves. Not only priests farther down in the line of succession, but every man might frame his own conception of Christianity by tracing the footprints of Jesus and the Apostles. Then men thronged into the churches, and listened while one with a good voice read from a Bible chained to the desk. Then great cities were proud to flourish by the preaching of the Word.

Now, it cannot be denied that though persecution because of one's thoughts, or even declarations, has ceased, yet some traces of the old bondage to human authorities still remain. There are churches whose people yet go to their standards to learn what the Scriptures may teach them. And there are even churches with no written creed but the Bible, and which are exceedingly

violent in their denunciation of all formal expressions of faith, but which nevertheless hold a distinctly defined form of doctrine, as existing in the mental conceptions of their leading teachers, and such creeds are quite as authoritative, and narrow, and invincible to reason as any for which heroes once fought and bled or upon which martyrs were once burned. In these cases, as of old, a pope, in all but formal election and solemn investiture, instructs the people as to what meaning they may find in the Bible they read. Also in our systematic theologies the lines already determined upon are rigidly drawn out, and each scriptural statement must pour out a meaning that will lie comfortably along these lines. It is like a frame set up in the market place, and then the separate texts are led out and nailed upon it. If any do not fit exactly they are drawn and stretched until they touch every point which is supposed to be essential to the system. If Jesus was crucified in public, why should not His words also be? And so, when the sermon or commentary is written out at length, the poor, crucified, groaning words of Jesus, or John, or Paul, distorted from their natural shape, do not themselves know what they were used originally to signify.

But while we yet find as much life in past errors and vanishing methods as always survives well on into any transition state, the illumination already received, and still pouring upon Christendom through the freedom of the intellect, reveals in the face of the Church to-day a purpose of independent investigation, utterly indifferent to modes of statement which in former times determined all forms of Christian thought, and all the meaning that might be found in the Scriptures. All exposition, whose whole aim was to prove the harmony of a preconceived system with the words of inspiration, will soon be found only in the mass of useless rubbish lying outside the back door of the Church, while every thoughtful person's ultimate conception of Christianity must be found in the book itself. The more the attention and thought of each individual is bent upon it alone, the more exhaustless and wonderful does it appear, and the higher above all human conception and origin does it rise. The reproach of theology is by no means the reproach of divine revelation, or of the Christianity it exhibits.

Saying this, it is right to add in passing that doctrinal systems and symbols have their appropriate place, and will probably never be wholly done away with as long as Christianity retains any organized form. They are guides to young teachers of the truth, and give an authority to their utterance which would otherwise be weak and unconvincing. They aid all interpreters to preserve a due proportion in the results they derive from the study of the sacred volume, and they are also a support to the many who must receive their instruction in authoritative rules rather than in the form of general principles.

II. We notice also that with the progress of free thought has come a better conception of the Deity and His work.

It is not a cause of reproach that men have always formed their notions of a supreme Deity from what they knew of themselves and each other. It is next to impossible to reach the idea in any other way. To the vast majority of men in all ages God has been simply an inconceivably great man. But the anthropological conception has not detracted from His majesty, for power, transcendency over all things, elevation beyond the highest reach of thought are notions which have always been inseparable from His being. He has ever been regarded as the sole originator, and the constant upholder, of all things that exist.

But men's conceptions of His work long limited His operations to short periods of time. The scriptural record of the genesis of all things seemed to exhibit Him as dwelling through the past eternity in the solitude of inaction; self-existent, in Himself sufficient to His own perfect felicity, until, a few thousands of years ago, unaccountably, except as explained by various imaginary, unrevealed motives, He moved out of Himself for just a moment, as it were, in the creation of worlds and intelligent creatures. The achievement, extending so far as the present existing universe, required but the slightest movement of His power, and was accomplished in an incredibly brief space of time —one hundred and forty-four hours having been regarded for ages as the whole period during which the Almighty Creator had given Himself up to the work of occupying space with something besides Himself. The impulse to active creative efforts had then, according to ideas once generally received, expended itself,

or else in that short space of time He had thrown from His hand as much as He would care to look after in the future, and to keep in operation, and so He "ended His work which He had made." Since which time He has simply sustained and upheld in being the universe of His creation.

The conception of a Deity inactive most of the time entered into dogma, and has filled a pretty large place in theology. Mankind were taught that at the beginning of eternity—as nearly as such a point is conceivable in thought—this silent Deity passed through a period of mental activity, in which He arranged, suitably to His own thought, all that should ever come to pass, from the little to the great, and then wrote it all out and sealed it up in an unchangeable decree. This was only one strong form in which a statement of His omniscience could be made, but it had the weakness of opening the way to a conception of Deity who would not trust Himself to plan or arrange anything after His own operations were fairly begun, but the whole book must be written and closed up before any active forces were released from His will, or any objects had sprung out of His hand.

How could human thought separate such majesty and infinite power, and limitless knowledge, from the joy and triumph of constant activity through all eternities? How much more glorious to Him to have thought that, having at some point in duration created our earth and its belongings, He has been similarly employed ever since, and had been through all preceding ages.

Now that it has ceased to be regarded as a flagrant sin to mention the word "evolution," except with withering contempt, the world discovers that, scarcely knowing how, its conception of Deity has changed from an infinite majesty, dwelling through eternity in a desolation of inaction, only relieved, here by one oasis of thought, and there by another of movement, into a conception which lays at His feet the highest tribute of reverence offered in any age, in regarding Him as ever framing and executing new designs, and ever engaged in extending the bounds of His created universe, and constantly bending it toward the highest ends.

The nurseries of the past recognized omniscience chiefly

through a haunting, overshadowing fear of a deity whose infinite resources were mostly occupied with the watching and recording of all the thoughts and words of helpless little children, to the intent that he might leap out of darkness upon them, and punish with swift judgments the simplest movements of their natural desires and inclinations. Without losing in any sense the moral value that belongs to a strict record of every thought and deed, the children of the future will be impressed, equally with the past, with the omniscience and omnipresence of the Deity while hearing His voice in every new ordinance of creation springing forth from His will, and in the movement of new worlds walking abroad to occupy the measureless voids known only to His infinite existence, for the reign of law can only mean the reign of God Almighty—the constant presence and ever active will of supreme Deity.

III. A third fact to be considered is the simplification of dogmatic statements of truth.

We have learned that the philosophy underlying Christian doctrine is really more simple and intelligible than the Church's formal statements. Here is a boundless field, and we will take but a single illustration.

We turn to the doctrine of justification by faith, which has been the meeting-ground of Protestantism through all the ages. The formal statements have made justification by faith merely a mechanical performance instead of a life throbbing with practical sympathies.

This will appear if we note the definitions of saving faith which have been urged, each claiming to define the only possible way of eternal life.

Sometimes faith is represented as if it were an actual substance, producing effects very like to a plaster applied by a surgeon, or a reagent in the hands of a chemist, which by its own power dissolves sin, as an entity, out of the soul, just as a stain is removed, or an acid is neutralized.

Again faith is presented as a complete reformation of life, and the teacher insists that faith and repentance are the same.

Another aims only to exalt and honor the cross, and he shows that faith includes the perfect substitution, instead of what was justly due to the sinner, of sufferings which an innocent one has

voluntarily submitted to. The substitution is made so complete in what is called the "act of faith," that no sin can offend God subsequently to it. That complete substitution honors God in the highest degree, because it delivers man from all responsibility in his own salvation. The whole efficiency is in the cross. The sovereign will of God needs no aid from the will, or inability of will, in the sinner to be saved.

Again, that useful laborer, to-day called an evangelist, frequently magnifies faith until it appears to be the only efficient agent in salvation, and so it is lifted above even the cross. It is made an arbitrary condition, upon the performance of which men enter into life, not because of anything in the nature either of man or God, nor for any particular reason, except that God has said it shall be so. Consistently with that view faith must be always a conscious performance. But an arbitrary, absolute condition, without which something cannot be, must necessarily have some merit in itself. It must have been appointed a condition because of this merit. With God nothing proceeds without a reason. But any merit associated with an act of believing certainly by so much detracts from Christ Himself as an atonement.

The meritoriousness of faith itself as associated with dogmatic teaching is manifest in the fact that it is exhibited as an active power, achieving results consciously sought after. It is an act, always understood when wrought, and performed distinctly for an end in view. Or it is an eye, a hand, or it is reliance, and the picture presents a passive Saviour, while the subject is actively, consciously reclining upon the supporting arm or bosom, distinctly apprehending the object He desires to realize thereby. If it is appropriation, you see in the picture the hand of the seeker closing over the impassive but coveted apple hanging upon the tree. When it is simply trust, you are made to see clearly a child listening to a loved father's voice, and leaping into a dark cellar, assured that the waiting arms will receive him before he can strike the bottom.

It is, in short, generally presented as the doing of something to gain something, and in any such case it is absurd to say that there is no merit in the doing.

Then to make this impression the stronger, the average evangelist takes up words spoken by Jesus, or Paul, to Jews, Pagans, or infidels, and, without any qualification, applies them to the case of Christian children who have always believed in Jesus as very God and the true Messiah, and have always striven to obey all the commandments. To these children are addressed the same words which Paul addressed to a pagan jailor: "Believe on the Lord Jesus Christ and thou shalt be saved." And, no adaptation given, the learner is left feeling all the dread and danger of perdition as long as he fails to perform this "act of faith," which he cannot do without understanding it, and which he cannot understand.

Now it is just to assert that under such conditions justification by faith is simply a mechanical performance having in it little or nothing essential either to the divine or the human nature. But why should we not look for something in harmony with both in any plan wherein God meets man? Most assuredly nothing is more true to the constant elements of human nature than God's way of justification. Christ and the Evangelists taught salvation by faith, because that doctrine is written out in human nature itself, because, human nature being what it is, there could not possibly be any other way of salvation.

We sometimes hear forms of expression which convey the idea that Jesus invented a new thing when He began to teach men that they might be saved by believing upon Him. Why in that teaching, knowing the heart of man, He simply read out of it what He had seen in it from the beginning. He did not open the way of faith to men any more than He opened the way of seeing or of walking. Men had always been believing just as they had always been breathing and eating. "By faith Abel." "By faith Enoch." "By faith Noah." "By faith Abraham." "By faith Moses." Jesus knew that these men were saved by faith just as Luther was. He did not labor to teach men to *believe*, that was something they had always been doing, but He came to teach them upon what object to direct their faith—to believe upon *Him*. His message was not, as it is often read, "he that *believeth* on Me hath everlasting life," but, "he that believeth on *Me*." When He reproached men for unbelief it was

simply because they did not turn their natures toward Him, for they must of necessity in themselves turn toward some object of trust.

There was no new kind of faith introduced into the teachings of Jesus. He simply recognized that it is written upon man's constitution and nature that faith within him shall be always, everywhere, and constantly a dominant force, lifting him up, and bearing him on. This is the force that impels men in all mechanical inventions and scientific discoveries. The "some-day" of the scientific man is simply the head-light in which his faith shines along upon the way before him. "Some-day" is with him a vast receptacle into which his faith throws everything which he wishes to take the form of certified fact, but which still lingers within the unknown. "Some-day" it will be shown to be a fact that—. "Some-day" men will discover that—. "Some-day" my prophecies will be read in the clear light of unquestioned reality. This invincible persuasion that a time will come when certain results will appear and reward his industrious research, or that of some brother seeker, is the inspiration under which he is willing to work a lifetime without reward. It is Kepler testing nineteen different theories with exhaustive experiment, involving almost infinite labor, before he grasps the three laws under whose command all his successors have walked the pathways of the heaven. It is Baron Bunsen patiently evaporating three tons of water from the Durkheim spring, before he can lift up to view the slightest particle of the new element Caesium. And so too LeVerrier, and Bodé, and Torricelli, and the whole long procession. Science reads nothing which faith did not first bring before its eye. All knowledge enters by this door.

Faith is also the inspiration which bears men on in the exercise of the inventive skill which circumvents and overcomes the greatest obstacles to happiness in the present life. In a lower sense every discovery which ameliorates man's worldly condition is a salvation by faith. So are all the smaller deliverances which he works out for himself by his own hand.

Now Jesus simply took hold upon that mighty force in human nature, and turned it toward Himself. Men should find what the world's wisdom had never been able to offer, deliverance

from spiritual bondage, by turning their whole nature over to Him, just as the scientific student turns his whole nature winningly over to some unknown truth. In the one case as in the other, faith is the moving force. "He that believeth on Me." "As many as receive Him." "Look unto Me." "Him that cometh unto Me." "If any man open the door." This *believing*, *receiving*, *looking*, *coming*, and *opening the door* are in relation to salvation actually the same thing. They are like the radii of the same circle, different lines but the same radius. Each of these words measures the exact distance between the soul of a sinful man and Christ the sinner's Saviour, and that distance is always the same.

In dogmatic theology the way by which the sinful soul departed from God is divided into a series of steps through which he may retrace it. There is repentance, and faith, and regeneration, and adoption, and assurance, and sanctification, and even entire sanctification, all arranged in an orderly relation to each other, and emphasized in importance according to the peculiar prejudice of Him who builds the system. But there is nothing in human nature corresponding to the arbitrary order in which these are arranged to come into the experience of the novitiate. Hence the difficulties experienced in conversion.

But all the sayings of the Scriptures are in substance, Return to God. Take back everything said and done against Him. Deny all for yourself as though all were your own. To turn heartily away from anything which offends God is to be saved from that evil thing. To undo as far as possible the act by which, when, in the fall, faith was transferred from God to the devil and so a wide separation made between man and God, is to assume an attitude in which the whole nature instinctively, whether consciously or unconsciously, takes hold upon Christ as the only ground of hope. It is the movement of human nature, like the movement of waters, when nothing else is possible but to move. The soul trusts because it can do no other. It may understand nothing except that to return to God and goodness is inevitably to accept Christ. Hence faith saves because it is only possible in cases where the soul has truly returned to God, where by honestly renouncing the evil, salvation from it follows, and being

possible only under those conditions, it is impossible to human nature that those conditions exist without faith in Christ springing into life in the soul.

Were it not for artificial definitions no one in accepting Christ would realize that he had reluctantly taken up an arbitrary condition laid down before him, and that in believing in Jesus he had worked his way through the difficulties of an involved duty, but rather that, enabled by the Divine Spirit, his own spirit made willing and right with God, the whole strong feeling of his nature flowed out to Christ in a mighty impulse, he scarcely knowing just when or how it began.

The dogmatism upon this subject has become more dogmatic through confusing a knowledge of one's salvation, on his own part, with the act of God in saving him, so that men are being taught that not to know that they are saved is as great sin as to be indifferent to salvation itself. Because no one can know that he is saved until he is conscious of trusting in Jesus, it is said none are saved until they are consciously trusting, no matter how fully they had turned against all that is against God.

Now suppose that instead of magnifying faith into an active efficiency in salvation, we recognize the truth written in human nature, that faith is the only condition of mind to which any revelation of truth is possible. We have seen that this is true in scientific research. It is likewise true in relation to salvation. It creates in the mind a persuasion of certainty which amounts to revelation to the soul that it is saved by the mercy of God. Hence what is known as the historical conversion of John Wesley, after years of most intense devotion to God, and sacrifice for His cause, was not any change in the mind of God toward him, but his coming into a knowledge that through Christ he was saved. So of many other historic conversions which have done service again and again in convincing some of the best men who ever lived that through years of devotion they were every moment in danger of hell, until at last they observed the one only condition and were finally saved. The statement of such experiences makes out that God is as artificial as we are, and far removed from all the gentle instincts of charity and helpfulness

with which even the hearts of men are constrained into a thousand lines of mercy and forbearance.

Other doctrines also furnish illustrations of the progress made in the detection of the principles underlying dogmatic statements, and by so much Christianity has been a gainer in the service it aims to render to mankind.

IV. Let us mention also a new conception of religion as a practical agency in the present life.

Through one period of violent agitation after another in the Church, dogma had come to be defined with such exactness and to be magnified into so high importance, that it was not merely the background and foundation of religion, but the very substance of religion itself. The work of the Church was to teach it. The sum of Christian duty was to accept it. To believe rightly of the virtues of the saints, or concerning the date of a fast, or the rights of a bishop, was to stand in the way of as high a measure of the favor of God, as to "thus think" concerning the Trinity.

Next to belief in the teachings of the Church nothing was held to be so pleasing to God as a holy pilgrimage, and, as a consequence, the multiplication of sacred places was carried to the extreme of absurdity. As an example, the dunghill upon which Job was supposed to have sat was sought out in Arabia, and thither godly men and women thronged in holy fervor.

But this idea, peculiar to an age, wore itself out at last. The human mind became satiated with constant speculation about God and the soul, and the immeasurable properties and possibilities of the unseen, and was overburdened with abstract definitions. From an inward necessity for a complete change, as in all the great movements in the progress of civilization, mankind turned instinctively from the disputes and decrees of councils, and sought relaxation by looking outward.

If some bold spirits abused the new freedom of thought so that skepticism, and even utter atheism, found courage in development, others, more wise, found equal inspiration and elevation in measuring their strength with great social and political questions, or in walking out along the fruitful paths of discovery and invention. New continents were waiting to be redeemed

from the solitudes of untracked seas, and new wonders of creative art and inventive skill were ready to be led out of their long imprisonment among the mysteries of the unknown. Then came wealth, with its many arms, following in the path of such practical appliances as ploughs and engines, before which the burdens which had weighed down humanity fled away. New amenities came into life. The home blossomed into culture and beauty. Man discovered that this present world, unfolding its flowers in the spring time, and freighted with its golden fruits of autumn, was as much designed for his happiness and delight as the harps of the angel choirs.

The result of this practical movement in thought was a conception of religion with more simple and helpful ministries than in the past. It ceased to be merely a fire escape, of value only to the soul, and that not until after death, but came as a spiritual illumination, blessing the home and society with a quiet helpfulness in the present life, which, by its suggestiveness, magnified the importance of escaping hell, and made Heaven more worth winning. The thoughts of men ceased to conjure up for a deity, an almighty man of infinite measurements, capable of inspiring only dread and terror, and selfishly absorbing into himself the children's bread, and every desirable thing in this world, but instead, they clothed Him with the loving attributes of a tender father. The Church no longer impoverished a whole nation to build a gorgeous cathedral as a gift to God, well pleasing in His sight, but the money was allowed to feed and clothe the poor, and their gladness, and blessing, and gratitude, were found to be more in sympathy with the spirit of universal worship than gothic arches in monuments of stone, and long drawn aisles, filled with the haggard forms of poverty, and echoing the wailings of the fatherless, the sick, and the desolate.

And so it has come about that, in the multitudinous march onward of modern charitable enterprises, men recognize the outflow of the old spirit and original life of Christianity, so long held under restraint by artificial barriers. Instead of those enjoying the greatest certainty of Heaven who are most willing to bend the neck to the yoke of authority, and to believe what inflicts the most staggering blows upon reason, the human race is

fast coming to answer everywhere to the inviting sympathies of a religion whose votaries do not stop to ask, or even to think, or care, about getting to Heaven at all, but find a heaven already begun, and stamped with the certain promise of immortal life, wherever the world of human existence is beautified and blessed by works of righteousness, charity and peace.

V. It was also a great service to mankind to teach the Church that human knowledge does not embrace the whole infinite circle of truth.

To assert that all the body of truth contained in the Scriptures had not been read into systems, would, not long ago, have subjected the speaker, at least, to some violence of contradiction. It did seem that the untiring industry which, by night and day, in the light of humble prayer, through patient years, had bent over this word, had harvested all the meaning it contained. And it has been common in each denomination to consider that every sheaf is safely garnered into its own standards. Each reads into itself the whole varied and wondrous combination of facts, promises, precepts, and arguments contained in the Scriptures, until it seems to the devotee of the system that nothing remains for any new-comer but an empty sepulchre. But as a traveller who always lifts his eyes to the skies never sees sticks, and stones, and even streams, and trees, in his path, so is he who studies the Word of God only to find in it the positive proofs of his system. He begins with a theory in harmony with which every word is to be read. A traveller might as well put out the eyes of his own guide. Yet how much of this kind of Bible reading there is. Yea, how little of any other kind. But let us with devout hearts come to this wonderful Book, determined patiently to seek its meaning, without any prejudice or preconception, just as we would seek the import of any fact in nature, and we shall find that no teachers have grasped and formulated all of its infinite contents. When I, for example, come down to the close of the grand eighth chapter to the Romans, and take out of it all that my Arminianism demands, all indeed that it can make use of, I find that there is a remainder with which I do not know what to do. And when I take the "Whosoever will" of Jesus, and also the cases of Judas, and Hymenaeus, and Alexander to the court of old

Calvinism, and hear all that it desires of them, my honest thought finds something remaining which has not been claimed. And Christianity is immeasurably the richer for these remainders. It stands upon a wider base. Like the infinity in the possible combinations of musical sounds, so exhaustless are the unfolding meanings, simple and in combination, of this wondrous treasury of truth from God to man. It lifts men's faith up to a supreme God in whom are depths and heights of which it is their glory that they appear contradictory to the superficial glance, which from us gathers in only a faint glimmering of light. Shall we attempt to measure and gauge Him by the exact mathematical rules which men have discovered? Rather let Him speak to us in rapturous strains of exalted poetry, which knows no rules discoverable by men. Let the rich flower, and wealth of fruitage, in this great Book, continue to discover new colors, and fragrance, and food, and life, to successive generations of teachers and readers. It contains more for all men than has ever yet been stated in any set form. It contains for some what others will never be able to read into it. Its higher and deeper meanings can only walk forth in answer to the prayer of exalted greatness of character and life, or to accompany the exhausted weariness of bending age, or to minister to experiences of destroying pain, or fathomless anguish, or to attend upon the sharp sting of bitter disappointment, or to find a hiding place for the face crimsoned with the blush of shame, the while all the rest of the world feels no throbbing of sympathetic chords, and yet much that has remained fathomless through all the bewildering years of a long earthly pilgrimage, may burst forth upon the dim eye of death with the brilliancy of unmistakable revelation.

But what is of vaster magnitude and importance is that the Church should have been taught that truth discovered by scientific investigation is as really the truth of God as what is contained in the revealed word. Through much tribulation the Church has entered into this wider kingdom of God. It has at last discovered its eternal fellowship with all verities, and no longer fears a fact. Galileo is no more compelled to appear false to his convictions. Pascal no longer takes refuge behind a subterfuge, for Christ the Lord has been found to dwell also in

the holy of holies of that great consecrated temple in which the astronomer with his telescope, the chemist with his crucible, and the anatomist with his evolution unite in praise of the Almighty Creator, by reading the mystery of His handiwork. Now baptism is claimed for every child of fact which science shall lead forth to the light. It shall bear a Christian name, and, regardless of the inward spirit of him who shall attend at its birth on the bed of nature, as well as in forgetfulness of its deep hiding which baffled men in pursuit, through ages of mystery, it shall enter the ranks of Christian discipleship, as a fellow helper in the service the whole universe must bring to the one Creator of all.

And yet more, the scorned skeptic may arise from the spurned grave of his long suffered contempt, and, if not wholly welcomed, at least the common rights of life shall be accorded to him. What if it shall yet be made to appear that somewhere in the vast infinities over which anointed truth eternally presides, those who have been outlawed by their opinions have nevertheless touched and followed correctly some arc of this inconceivable circle? They must be adjudged to have been in harmony with the truth so far as they were able to discern and receive it, and so in the end may be brought into everlasting fellowship with all that is true, and good, and beautiful, and holy; and even they who stood in the outer court of skeptical philosophy, furnishing eloquent preachers with apt points for many warning illustrations, as well as a long procession of those who, in the advance guard of scientific discovery, were right masculine doubters, and not always reverent toward organized Christianity, shall not nevertheless be allowed to fail utterly of a heaven.

VI. Again, it is a great service which emancipated thought has rendered in revealing to Christianity the endless variety possible under its unity.

Perfect uniformity was a grand dream, according to the ideas of the times when it seemed possible. It appeared so reasonable that, of all things, they should have common thoughts and opinions, and common forms of worship, who expect through the same narrow way to enter in at the same strait gate. What

was needed to effect this end but an elaborate Confession of Faith? But the movement in thought which greeted the promulgation of that great Confession has, with ripening culture, developed a multiplicity of views, thoughts, and opinions about religion, at the same time that it has flung its changing notions into every department of life. Nothing is simple any longer. In the days when one man's opinions about the nature of God, His will in the vast and in the minute, concerning the constitution of the Church and the order of worship, sufficed for the whole human race, and were accepted without question, the ideas of men upon all subjects were equally simple, and their creative powers in relation to the comforts of the present time were exceedingly barren. But since then an infinite multiplication has invaded all the areas of thought, with the certain promise that it shall continue and grow, rather than diminish. It is not thinkable that religion can be an exception.

The ages in which the greatest superstition and ignorance, and cruelty prevailed, were the times when the Church was most positive in its teaching about details, of which we know that nothing clear and certain is contained in revelation. They knew then all about the being of God, the employments of the saved, and the manner of suffering endured by the lost, how the work of Christ enters into the economy of the universe, and they understood God's idea of the government of the Church in every detail, so that they could freely and safely denounce with their anathemas all who dared to differ from them. Great teachers distinguished very imperfectly between divine inspiration, and their own inclinations, which they described as the authority of the Church. Danté's imagination in the "Inferno," aided by Doré's pencil, furnishes an exhilarating illustration of the attentionto detail in religious dogma. I remember a catechism which cheered and inspired our youthful steps. It was inscribed as "A Catechism for Children of Tender Years." To the question "What is Hell?" came the helpful answer, "Hell is a dark and bottomless pit, full of fire and brimstone." There was no darkening of wicked uncertainty, no soul-destroying doubt, in his mind who thus walked in a path along which flamed the clear light of unmistakable definition.

But it was inevitable that these positive ideas of religious detail must be changed. They furnished a religion full of the human, but with little of the divine. While politics, literature, and social life were developing as trees enriched by the putting out of new branches, with their clustering foliage and reproductive fruits, there must be movement in religious thought also. Like the motion of the earth, it was inevitable, and would just go on whether men were prepared to accept of it or not. Culture can create new armies of thought, just as it can push up new forms of life, new varieties of plants and animals, but it can extinguish neither the one nor the other. As well attempt to limit the sphere of development of rose-life. We are taught that all of its measureless fragrance, and its infinite incarnation of unfolding color, come of culture from one original form of rose which lifted up its scentless corolla with single petals. But it is beyond all conception that this wealth of fragrance and beauty shall be ever again driven back into the one uninteresting dog-rose. And it is just as impossible to conceive that all the views, and thoughts, and forms, and methods in endless variety, with an exhaustless reproductive force within them, which religious culture has created, should turn their current, and the whole stream pour itself into one pope's brain. As the varieties of life, once brought into existence, shall forever scatter their children through the vast breadths of space, so new created thoughts will walk all over the universe forever. Henceforth Christianity shall know no unity in views of doctrine, nor forms of worship. It will have unity as to its end. That can be but one. It will be united in a very few central and essential truths. The future will know no creed-making age. Whosoever says, "He that will be saved must thus think," will confine the application almost entirely to sovereign mercy and power.

Now in the discovery that this infinite diversity is not inconsistent with the unity of Christianity we have the foundation of the hope of a united Protestantism. This may be, and yet all men's brains need not be fitted into some one man's skull. To-day a united Protestantism is a dream, at variance with all our fond denominational attachments, and rivalries. To-morrow's sun will look down upon it an accomplished fact. Ever after

mankind will marvel at the ideas which for ages made possible the antagonisms of sects all loving the same Lord. When the one Protestant Church holding tenaciously every essential truth of Christianity, yet gives full scope to every man's individuality, the essential weakness of Romanism will be fully manifest. The dread in the present time of its encroachments will pass away. The vast nursery of ignorance, it will cease to be a potent factor in the problems of civilization.

Then will Christianity take hold closely upon the prospect of uniting the whole human race. The hope of the faithful through ages of doubt and conflict will be an easy realization. The nations will literally flow into the mountain of the Lord's house.

The changes which have come as the result of allowing men to think freely, and to say what they think on religious doctrine and practice have caused unspeakable anguish to a few whose narrow prejudices had walled in a little heaven into which they hoped to gather a few of their own pattern, but the Church as a whole realizes a more abiding hold upon every truth which inseparably belongs to a true Christianity, and all mankind a wider gate of entrance into the Christian hope and life, as much the heritage of the alien and the pagan afar off as of the priests dwelling in the temple.

THE LIMITED AREA OF CHRISTIANITY.

[Delivered before the American Institute of Christian Philosophy, Dec. 9th, 1889.]

By Prof. Wm. W. Olssen, St. Stephen's College, N. Y.

THE limited field and the gradual development of the Christian religion has sometimes been brought forward as an objection to its divine authority. On the theory of evolution some think that they can understand the place of Christianity in the world and give a rational account of its growth and influence, as well as of what they call its manifest deficiencies and failures. As a divine institution, however, provided by an omnipotent Creator for the spiritual elevation of the human race, they deem it wholly inexplicable.

The objection I think arises from an entire misconception of the nature and purpose of the Christian religion, as well as from an inadequate idea of the logical necessities of evolution. It has however quite a specious force, and has troubled the minds of even devout Christians, when they reflect upon the fact that Christ so evidently expected His Church to become universal.

The objection will perhaps be more readily and satisfactorily answered by considering first the original character and the growth of divine revelation, through which Christianity occupies the position which it now holds in the world.

The original revelation given to Adam was simple in its nature. Before the fall it proclaimed the obligation of obedience and the certain punishment of disobedience; it provided for an immediate personal communion with God, and probably for an outward sacrificial worship. After the fall, the hope of restoration was held out, through the advent of a future Redeemer obscurely intimated; and the sacrificial worship, which had previously been mainly, if not wholly, a eucharistic acknowledgment of divine providence, became an instrument for the expression of a sense

of guilt and a typical representation of the one great sacrifice through which a perfect atonement should thereafter be made.

This revelation of necessity became the heritage of each descendant of Adam; and as a matter of fact we see in all heathendom, at the present day, a remnant of true religion, overlaid and corrupted to such an extent that sometimes it is difficult to distinguish it. This remnant consists in the universal prevalence of sacrifice, in a belief in spiritual existences higher than man, and frequently in the recognition of one spirit supreme over all others. We find also a universal perception of a difference between right and wrong, though the conscience is often so perverted that it sanctions what a true and enlightened morality condemns; even as in Christian nations deeds have at some periods been approved, which at the present day are universally reprobated.

The second stage of development in divine revelation appeared while the government of God's people was still patriarchal. Promises of a special blessing were given to Abraham and his seed. God entered into a new convenant relation towards him, whereby his descendants were set apart from the rest of mankind to be a peculiar people, the appointed guardians of the revelation of God's true character, as the one Supreme Creator, and beneficent ruler, not only of His chosen people, but of the whole world. "In thy seed shall all the nations of the earth be blessed."

When the Church of God, from being patriarchal, was made national, there was need of a more elaborate and fixed ceremonial to keep the entire people united in definite religious observances, and make them realize a national as well as personal responsibility to God. A priesthood, distinct from the civil rulers, was instituted to preside over the appointed rites, and a temple was built for the special manifestation of God's presence.

At this period in the history of revelation a written record of divine truth became possible, for there was now a distinct class of men, set apart to minister in holy things, by whom that record might be preserved and handed down to succeeding generations. St. Paul directs attention to this as the leading feature in the benefit conferred by the Jewish dispensation.

"What advantage then hath the Jew? Or what profit is there of circumcision? Much every way; chiefly that unto them were committed the oracles of God."

Finally when the fulness of time was come the way of redemption and restoration was clearly revealed. The great atonement for sin, at first obscurely intimated to the patriarchs, subsequently foreshadowed in the ceremonies of the law, and gradually unfolded by the successive prophets of Israel, was completed in the sufferings and death of Christ.

In this we may behold the culmination of a law that pervades all nature. Regeneration and progress in every sphere of life arise from suffering and death. The wheat exhausts its strength and dies that it may mature the seed through which it is born again to a new life. Innumerable seedlings of all kinds perish, in order that the few survivors may grow vigorously and attain a better degree of excellence. The animal toils and suffers for its young and will even sacrifice life in their defence. Vicarious suffering, voluntary or involuntary, is stamped as a characteristic feature upon the whole creation.

Regeneration and progress in the social life of men has also been attained by the same instrumentality. The great reformers of both ancient and modern times have been those who suffered and died for their fellow-men.

In the spiritual life the same law holds good. God's method for the regeneration and elevation of the human race, gradually revealed from age to age, culminates at last in the full disclosure of the great doctrine of the atonement, accomplished through the vicarious sacrifice of one who belonged to the human race, and yet was more than man.

Taking thus a general view of the progress and development of divine revelation, as exhibited in the Scriptures and in the history of the world, we see various stages in that growth, each of which has retained a place among men beyond the limits of the Christian Church, with more or less persistency, and with varying degrees of corruption, down to the present day. Looking at different quarters of the earth we find a gradation in religious belief, from the lowest fetichism to the true spirituality of the purest Christianity.

It is this state and condition of religion in the world that has led the evolutionist to apply his theory to explain the existence of Christianity, and to claim that its origin and growth are the result of a purely natural process of the human mind, and that its manifest faults and limited success are an indication of the imperfection and limited faculties of its devisers and originators.

Are we to accept this conclusion as a logical and scientific solution of the problem of the existence of Christianity? Perhaps we may gain a clearer conception of the true nature and source of the development of religion in the world, if we compare it with the corresponding evolutions and present state of physical life.

Why should not religion from the beginning have been fully developed and divinely imparted to men? We may suggest reasons similar to those which would apply to the creation at first of the simplest physical organisms.

Growth and development constitute the general law of all living creatures, and there is no reason to limit that law to mere physical life. Religion in each Christian soul has developed in a manner corresponding with the growth of the body and the unfolding of the intellectual capacity and the moral perceptions. What is true of the individual would naturally and ordinarily be true of the race. We have sufficient records to show that the earliest men were in many respects children. They were undeveloped in everything except physical structure. They were unacquainted with the arts and sciences. They had little or no experience of life, which would lead them to understand and value those moral precepts and that necessary self-restraint by which alone society can exist. Their spiritual conceptions also could be only of such a nature as to bring before them in a very imperfect manner their individual relation to God, before they had had personal and prolonged experience of the misery of sin and thus learned to appreciate the reality of its guilt. The primitive stage of religion must therefore needs have been, such as we find it recorded in the history of the early patriarchs, of a simple character and have been gradually developed as men gained experience in the spiritual life and understood more clearly their own deficiencies and attained a better appreciation of those

higher blessings for which the natural and irrepressible aspirations of the heart bade them look.

Why should the highest form of religion have been for so long a time limited in its area and not have at once spread over the whole earth? The rate at which Christianity extended during the first three centuries, had it continued to the present day, would have sufficed for the Church to have evangelized all mankind. On the contrary in many portions of the world, in northern Africa, southwestern Asia, and in other more remote countries, where once were numerous Christian communities, paganism or Mahometanism now prevails.

Let us glance at analogous facts in the physical world. We see there the highest forms of animal life limited to definite areas of greater or less extent. The fauna of the northern temperate regions is as a whole of a distinctly different type from that of the torrid or even the southern temperate zone. The animal life of the Eastern continent surpasses that of North America. This last is in turn superior to that of South America; while that of Australia stands lowest in the scale.

If we look back through the geological ages, we shall find that in all of these great provinces life began with the lowest forms and gradually developed, but that progress was arrested in each at different stages and has ever since remained stationary; and that many inferior types have disappeared from time to time, and, in those regions where higher grades have been introduced, are now known only by their fossil remains.

We have in this a very marked parallelism between the physical and the spiritual. In both we see a continuous advance, and in both a limitation of progress in area and in time. Christianity, Mahometanism, Buddhism, Brahminism, Confucianism, Taouism, and Fetichism, all have definite geographical limits, with only sporadic exhibitions elsewhere. Although Christianity has made some inroad among the devotees of other religions, yet compared with the many millions still heathen, the Christians of the same races are a mere handful.

The question, why Christianity should be thus limited in the range of both time and area, would appear to be precisely

analogous to the question, why the highest order of animals should have been in like manner limited.

The evolutionist perhaps will say, I agree with this entirely, and the answer in both cases I hold to be the same, and very simple. The doctrine of evolution and the survival of the fittest explains the whole matter.

The highest of animals have been gradually developed in a countless series of ages, by a natural process based upon the physical law of variation, and the economical and social law, by which the best of each race survive their inferiors, and propagate their own better qualities.

In a similar way, the highest type of religion has also been developed, in the long progress of myriad years, from the lowest fetichism. Such a result has been attained by a natural process based upon the mental law which abhors monotony and seeks change and variety of thought. This law working in connection with the moral and social instincts, brings forward and fixes the attention upon that which is most efficacious in satisfying the natural aspirations and cravings of the soul. In this way a spiritual philosophy is gradually built up, adapted to the nature and the wants of man.

Such is the evolutionist's explanation of the origin and the late appearance of Christianity.

The confinement of the highest development of both spiritual and animal life to limited areas, it has been thought, may be accounted for by the large number of inferior organisms that fill up adjacent regions and, by their numerical strength, erect an impassable barrier to the progress of the few, however superior in their nature. The vast multitude of the former oppose a kind of *vis inertiæ* that is not readily overcome.

The same difficulty would also occur, even in a greater degree, in establishing anywhere the first few original forms of a higher character amid the numerous throng of lower organisms already occupying the field; and this has been acknowledged a great defect in the theory of evolution.

To supplement such an explanation and obviate the objection, the influence of environment is called in, and it is asserted that the difference of climate and food, the greater or less fertility of

the soil, and other local peculiarities prevent the wide spreading of newer types of life, and also their separate and distinct development beyond a certain definite area.

The effect of environment has a very plausible appearance as a theory, but, when we examine into its practical results, we find little to sustain the extravagant deductions of the evolutionist.

What difference of environment exists between the countries in the north temperate zone and those in the south temperate? In each we find high mountains covered with snow, large streams and fertile lands, yet there is a striking difference in the character of animal life. The torrid zone intervening might hinder migration, but what has prevented the separate development in each temperate zone, if not of precisely the same animals, at least of those standing equally high in the scale?

Between the central belt of Africa and the great Indian peninsula there is really no essential difference of environment. High mountains, immense rivers, extensive jungles and morasses characterize both, while access from one to the other would be by no means difficult. Yet here also the fauna and the flora are characteristically different. Even those genera which are common to both, as the elephant and the rhinoceros, consist of species that are markedly distinct; while the hippopotamus, the chimpanzee and the gorilla are unknown in India, and the tiger and panther have no representatives in Africa.

Again, if we look at the effect of environment in a particular region, we do not see it producing the same, or similar results, in the different orders and genera of animals.

Man is an animal, and the strict materialist would say that he is purely and simply an animal. His intelligence is regarded as nothing else than a higher physical development. Yet in those same countries where the lower animals are strongest and fiercest, man is physically weakest and most cowardly. Why should not the same surroundings and the same abundance of food have produced a race of giants, or the necessity of contending against equal difficulties have developed strong men, who like Samson, could seize the lion and rend his jaws, and whom even the tiger would not dare attack?

It cannot be said that man's intellectual faculties have been

unfolded at the expense of his physical powers, for in that very region where men are degraded almost to their lowest level, we find animals that most nearly resemble them in physical structure and far surpass them in strength of body. Moreover where man has attained his highest advancement physically, there also he is the most highly developed mentally.

These contradictions show plainly that something more than environment, and a successful struggle for existence, has been concerned in the production of the various types of animal life, as we see them now existing.

If then the limitation of special types of animal life to particular regions cannot justly be accounted for, by any or all of those instrumentalities which have been commonly adduced, we can hardly anticipate finding any natural causes for the limitation of special forms of religion to particular regions.

The effects of climate and race and the geographical advantages of position for commercial and industrial enterprise, whereby civilization is advanced, have all been appealed to, for the different degrees of development in religious as well as social progress. The history of the various nations and ages nevertheless shows that, whatever influence these causes may have exerted, we cannot attribute to them any power to elevate the moral and spiritual conceptions. The civilization of Egypt, Babylon, India, China, Persia, Greece and Rome was in ancient times carried to a high degree, in its merely physical, emotional and sensual aspects. The intellect also was highly cultivated, but the moral and spiritual life of the people in general remained at a very low level. Whatever the few great thinkers and meditators (one or two only in thousands of years) may have themselves attained, they could produce no permanent beneficial effect of any wide extent. Their civilization did not exclude the most cruel sports, the most wanton and unprovoked wars, and the wholesale plundering and massacre, or enslavement, of their captured enemies. The countries I have named were diverse in race as well as climate, variously situated as to facilities for commerce and manufactures, yet notwithstanding all their brilliancy of intellect, their progress in the arts and sciences, their luxurious magnificence and splendor, the results of ac-

cumulated wealth, not one of them ever devised a system of morality which, however complete in conception, could influence the daily lives of the people. In none of them do we find any writers capable of depicting those lofty views of the power and glory, the patience and love of God, which we see so fully portrayed in the pathetic and sublime prophecies addressed by persecuted and oppressed seers to the poor and scanty tribes of a semi-barbarous people on the banks of the Jordan.

History plainly shows that progress in civilization by no means leads to increased spirituality in the practice of religion and morals. On the contrary, it has, when disconnected with a pure religion, proved the great corrupter of the human race. So far as past observation goes, increased civilization has invariably brought in greater sensuality and relaxed the stringency of the moral code, and has thus promoted practical if not avowed infidelity in religion.

Race, climate, and progress in civilization cannot then be regarded as the motive powers by which the human mind has been led on to the conception of something higher than things visible, and beyond what is human and transitory. The theory of evolution fails because the same environment is found where there are contradictory results, and history informs us that the truest and highest spirituality in the ancient world was attained just where, and when, the environment seemed best adapted to crush out all true religion, and all belief in a divine providence, under the pressure of a struggle for national and personal existence, in a land that was for centuries the battlefield of powerful and warlike neighbors.

How then are we to account for the striking analogy between the developments of physical life and spiritual life? If there are no inherent common, or similar, laws of nature by which such parallel results have been attained, we must look beyond nature, to the supernatural, for an answer. There must be some controlling spiritual power directing the progress of spiritual life in such a way as to work out the highest and best results. As Dr. Martineau has eloquently expressed it: "Not till we read the *causality behind phenomena* does the universe look at us with a grandeur that is divine; not till we find our duty invested with

a supernatural light, does it subdue us with its sanctity; it is the embrace of the all-comprehending God, in His energy and His perfection, which transforms each into a religious object. . . . It is not a quantitive affair, constituted by any boundlessness of space, time and number; and did these contain nothing but their own magnitudes, neither the heavens nor the ages would suggest anything divine; and when tribes of men have worshipped the vault that holds sun and stars, or the eternal past, it has been as the abode of *Creative Mind and Living Power;* the wonder of which, the immensity only serves to enhance" ("Study of Religion" Vol. II. pp., 307, 308).

When seeking a reason for the present state and condition of Christianity in the world, we shall find it, if anywhere, only in the "*Causality behind phenomena*," in the "*all-comprehending creative Power and Mind*." Whatever course an intelligent mind pursues must have an object in view. The divine purpose, however, cannot, except very obscurely and doubtfully, be penetrated by the unaided human perception. To assist us we have intimations and suggestions in the Word of God, that may perhaps guide us aright, to get a glimpse of the ends designed in the observed limitation and slow growth of Christianity.

We may regard the Mosaic dispensation and the kingdom of Israel as a microcosm of which Christianity is the corresponding macrocosm. We have direct scriptural authority to assure us that much in the law and in the history of the old convenant was typical of and fulfilled in the Gospel and the history of the new dispensation. Now there was no clearer and more definite promise to the descendants of Abraham than that they should possess the whole land, "from the river of Egypt unto the great river, the river Euphrates." Yet that promise has never been fulfilled to the present day, even if we include under its terms the descendants of Ishmael as well as of Isaac.

In the Scriptures themselves we find two reasons assigned for the failure of this promise. First, it is said, the Canaanites were permitted to dwell long in the land, because the Israelites were not numerous enough, at once to occupy and cultivate the whole. Thus we read, in Deuteronomy vii., 22, 23, "The Lord thy God shall put out those nations before thee by little and

little; thou mayest not consume them at once lest the beasts of the field increase upon thee. But the Lord thy God shall deliver them unto thee, and shall destroy them with a mighty destruction, until they be destroyed."

Beside this prudential reason, which did not revoke the promise, but only delayed its fulfilment, there was a second one, disciplinary in its character. The Israelites for their sins were afflicted by the Canaanites and finally, because of their apostacy, were carried away captive into a far country and are now scattered over the face of the earth. This penalty also had been denounced against them before they entered the promised land.

In the slow and limited distribution of Christianity we may see the working of like causes and attribute to them like divine purposes.

The moral character of the men with whom Christianity has had to contend was an almost insurmountable hindrance to its rapid spreading. The degradation and superstition which, for thousands of years, had spiritually oppressed and weighed down the vast populations of heathendom, could not vanish in a moment. Men require time to be educated spiritually as well as intellectually. It requires more than one generation to bring about a general change in the moral character and to elevate the spiritual conceptions of any race. In the meanwhile the few who are striving after better things are often unconsciously influenced, more or less, by the superstition and the license of the many thousands around them.

The work of evangelizing degraded races thus necessarily remains imperfect, even while it meets with no open opposition. After the new and higher standard has nominally gained the supremacy, the old superstitions still linger and affect many. This tendency has been clearly illustrated among the descendants of the heathen of Northern Europe, who were rapidly Christianized. In consequence of this haste, many old traditionary superstitions long held their ground and some survive among the ignorant to the present day.

Because human nature is thus constituted, the growth of Christianity was promoted by at first planting and maintaining it in all its fulness at strong centres, instead of dissipating it over

extensive areas where, through its weakness, it would have been overwhelmed by the flood of surrounding wickedness and idolatry. At first Christianity was limited in its area mainly to cities, where its adherents while still few in number could frequently meet together and strengthen each other's religious life by mutual exhortation and consolation, and by joining in the common public worship of their risen Lord. The inhabitants of the surrounding country regions continued much longer in the darkness of heathenism, so that the word *paganus* became a synonym for idolater.

Subsequently Christianity was limited to nations, becoming the established religion of the Roman Empire, and then of the various kingdoms into which the empire was dissolved. At a later period the area of Christianity, though enlarged, was confined mainly to one race. Notwithstanding the Jewish origin of Christianity, its adherents among those of Semitic birth have been comparatively few. Its progress has been almost entirely restricted to the European branch of the great Indo-germanic family.

The advantage, in a prudential point of view, of this concentration within limited areas gradually enlarged, we may see in the fact that where outlying Churches have been established, they have, when cut off from ready intercourse with the rest of Christendom, become deeply corrupt, or have fallen into decay and disappeared.

As then we know, on the testimony of Holy Scripture, one reason for delay, in the fulfilment of the promise made to Abraham, to have been prudential, designed for the safety of God's people, and for the preservation of true religion; so may we regard a similar delay in the universal spreading of Christianity, as due in part to a like prudential reason. The depth of superstition and immorality in the world was so great that, only by concentrating the power of the Gospel, first in cities, then in nations and finally in a single race, could it withstand the corrupting influence of the vast hordes of idolaters.

A second reason for the imperfect fulfilment of God's promise to Abraham was disciplinary. As the Israelites fell into sin and were punished by being deprived of the full fruition of their in-

heritance; so the imperfect fulfilment of the expectation of soon evangelizing the whole world,—which expectation was warranted by the Saviour's commission to His Apostles,—is largely owing to the sins and unfaithfulness of His Church.

God might have utterly swept away His unfaithful people, as He has in part in various regions of Asia and Africa, and might have raised up a new and righteous instrument for His work; but He has exercised a long-suffering patience and waited. This delay is disciplinary in its character. The sins of men in this, as in so many other instances, work out their own retribution. The fruition of the glorious promises made to the Church is put off to future generations, and meanwhile Christians are suffering many evils, the direct consequences of unfaithfulness in the work committed to them.

Had the Church been faithful to her trust in evangelizing the world, how different might have been the history of Christendom. Instead of fightings and tumults there might have been peace and good-will. Instead of violence and plundering there might have been brotherly kindness and charity. What a vast amount of physical suffering as well as spiritual loss would thus have been avoided.

While God is thus disciplining His Church by leaving them to feel the consequences of their unfaithfulness, the heathen also are suffering loss both physically and spiritually. Though Christians are responsible, in part at least, for this, and are guilty in the sight of God, may we not regard the loss which the heathen sustain, as likewise disciplinary? They might have retained, but for the sins and neglect of their forefathers, the revelation once given to Adam. They might have benefited by the same promise of a Redeemer, and the same spiritual assistance to lead a life of faith acceptable to God, as Abel and Enoch.

The surroundings of the heathen have, however, been such for centuries, that it has been almost, and in some lands perhaps quite impossible to attain any just conception of the character and requirements of God. Will not the long-suffering patience exhibited towards those who have enjoyed the fulness of divine grace, and yet have grievously sinned, lead us to look for equal patience in God's dealings with those who have had no oppor-

tunity to know His will? In this world they have been severely punished for the sins of their forefathers. The loss which they have sustained physically, intellectually, morally, and spiritually can hardly be estimated. This loss must form a large part of those "few stripes," with which it is said that those who know not their Lord's will shall be beaten.

May we not then hope that those among the heathen, who, amid all the darkness and corruption by which they are surrounded, have retained the consciousness of right and wrong, perverted though it be, and have endeavored to serve such gods as they know, exhibiting thus a faith in the supernatural, and a sense of responsibility to a higher power—may we not hope that such as these, while meeting with a suitable degree of punishment in a future life will nevertheless to some extent participate in the blessing of redemption through Christ, promised to the whole race in the original revelation given to the first man, of whom all the heathen, as well as Christians are descendants and heirs?

But how can any degree of punishment, especially if it be eternal, be consistent with redemption? The Holy Scriptures assure us that there are different degrees of glory in the future world; and that there are also those that are saved yet so as by fire. May not some of the heathen be of this number, and if admitted into the lower places in Heaven, would not the loss of that higher glory, which might have been theirs but for their fathers' sins, be justly called a punishment, and perhaps a sufficient one to fill up what was lacking in the appointed measure of their few stripes? Such a punishment would be eternal in its consequences. For however much the soul may in a future state develop in spiritual perception, it would forever occupy a lower place than that to which otherwise it might have attained.

CHRISTIAN SCIENTISM.

[Delivered before the American Institute of Christian Philosophy, New York City, Nov. 11th, 1889.]

By D. B. St. John Roosa, M.D., LL.D.

THE doctrine of the cure of disease by the exercise of Christian faith, or by the concentration of the mind, the use of what may fairly be termed a kind of incantation, to the exclusion of the means employed by medical and surgical science, has many adherents in this country and in Africa—parts of the world which may properly be considered as the antipodes of civilization and Christianity.

When I had the honor of being invited by this learned and Christian body, to discuss the subject of Christian Scientism before them, I was inclined to think that the chief believers in this system of cure were to be found among the native tribes of the dark continent, and that it would be a work of supererogation to add to the literature of the subject already accessible in our country. I had supposed that the conclusive arguments of our theologians had so driven the theory of the cure of disease by faith alone, however clear and pure that faith, from the minds of Christian people at least, that there remained no need for a discussion of the subject upon a scriptural basis; but upon a more exact examination, I find that many are found among Christian people, among Protestants even, in contradistinction to Catholics—who do not deny the occurrence of miracles—who believe that the gift of healing has not passed away from the Christian Church, except so far as a want of faith prevents its full exercise, however it may be with the gift of tongues and prophesying and raising the dead. Besides this, since the Faith Cure began to be promulgated, there has been an evolution and an expansion in certain notably intellectual quarters. Faith Cure has become Phrenopathy, or Mind Cure.

It has been convenient for some adherents of what was originally Christian science, to ignore the scriptural doctrines to some extent. Possibly they have found themselves, after the refutations to which I have alluded, embarrassed in the defence of their doctrines from the Bible. Yet Faith Cure, Christian Science, Phrenopathy, the Mind Cure and the system of African incantations are strangely alike. They are essentially one and the same. They have one idea in common, and that is that disease is to be always exorcised, and that what are commonly called human means are unnecessary. Now and then, we may be able to distinguish Christian Science from the Mind Cure, and the Mind Cure from medical practice in Emin Pacha's country, but not always.

In what I have to say, I do not intend to attempt a complete answer to the argument from Scripture. I am clearly incapable of presenting this as it has been by Dr. Vincent,* Dr. Speir, and others, but in the main I must speak simply as a Christian physician who believes that it is not wise or safe to ignore medical science in the treatment of disease, and as one who finds in all true science but a part of the infinite knowledge of the divine mind.

There is a very natural alarm as to the growing belief in the cure of disease by the exercise of faith, or by the concentration of the mind upon the assumed fact that disease is a delusion, that it has no real existence. This alarm is caused by the effects which have been seen to follow from the adoption of the beliefs of Christian scientists, or the theories of the mind curers. One is that a practical Christian faith, leading to the proper performance of one's every-day, it may be humdrum duties, is gradually undermined. Another effect may be that proper medical care, which is often essential to the cure of disease, is not used, and human life is consequently sacrificed. These effects are deplorable, but they have always occurred as the result of one human agency or other, and they must be endured until wiser days dawn upon us. Fortunately, too, the medical profession has learned, and much before the public at large, that there is much of disease that is self-limited, so that any form of treatment not

* *Presbyterian Review*, vol. IV., p. 473. *Ibid.*, vol. V., p. 305.

positively obstructive to the courses of nature, may result in a cure. Then there must be, especially as to the healing art, which still leaves so much to be wished for, epidemic delusions which now and then spread over the Christian and civilized world. Epidemics of cholera and yellow fever do not usually occur at one time and the same place. Millerism or Second Adventism is pretty dead. Spiritualism seems to have an obscure and sickly existence. Perkin's tractors have long since withdrawn from the field; the wooden tractors that cured as much disease as the original, finished them. Animal magnetism has given place to hypnotism or cure by suggestion, and this, whatever it may come to, leads a precarious existence as a clinical curiosity in the lecture-rooms of learned professors of nervous diseases. Homeopathy, as promulgated by Hahnemann, is so dead that nothing but the name is left, powerful as is this to conjure with. Thompsonianism, with its emesis and diaphoresis, its tobacco and lobelia, has given place to a so-called eclecticism which is hardly to be distinguished from the ordinary school of medicine. Many of the beliefs and systems of the old school in medicine, the so-called allopathic school, have perished from the earth. The average medical student of to-day could hardly name them or their authors.

The science of medicine, although its votaries are still somewhat divided in name, although they occasionally enunciate their shibboleths with bitterness, is really one. Among those of every sect who call themselves physicians, there is but very little claim to cure disease except by treatment deduced from watching the processes of nature, from study of the working of the human body, and from the collation of the experiences of men educated in medicine who have treated many patients.

The chief opponent of the science of medicine of the nineteenth century is the Christian scientist, the faith curer, or the phrenopathist. There is nothing, therefore, unfitting in the appearance of the medical doctor to defend his own craft.

It has been a long and dreary series of pathways and roads that have finally led the medical profession out into this plain of common belief. A brief recital of the barest outlines of the history of medicine may assist us to a clearer exposition of what

is held to-day by the doctors of human medical science, and may show why even the Christians among them refuse to accept a medical system which ignores the structure of the human body.

The Homeric poems give us a glimpse of the medicine and surgery of the time. There were physicians and surgeons, perhaps, and some skill in healing wounds, but the science was in a rudimentary condition. Although Hippocrates was the father of medicine and had a good idea of medical ethics, as witness the Hippocratic oath, and although he knew a great deal of the course of disease, his knowledge of the machine called the human body was very deficient. Some progress was made by the Alexandrian school. Indeed, human bodies may have been dissected by them, but Roman medicine coming after this, the medicine of the time of our Lord, left much to be desired in the cultivation of the science, and it is doubtful if it was an advance upon Grecian knowledge. They had many systems and many schools, but they knew very little about the human body.

Aristotle knew much of the medical science of his day, but that science was a feeble exhibit of the extent of human knowledge. Much is at times said of the Arabians, and many eloquent sentences may be found in Draper's works as to what they did for science, but the best authorities agree that they added very little, if anything, to medical knowledge, although many of the Arabian authors have been translated. Arabian medicine is chiefly Greek and Roman medicine modified by Oriental minds.

It is in no contemptuous spirit that we are obliged to speak of a knowledge of the works of Galen, Celsus, and even of those of the great reformer, Paracelsus, as being in no way essential to our present needs for the recognition and cure of disease. It is a simple fact that, from our present standpoint, there was no ground upon which the science of medicine could stand until human anatomy and human physiology were understood. We might as well speak of literature without an alphabet. The first clear light that shines upon general medicine is found in the discovery of the circulation of blood by Harvey, not much more than two hundred years ago—and in Bacon's philosophy. Medical science may be said to have, then, taken shape from formless material deposited for centuries in the crucible of speculation

and experience. The science has steadily progressed until it begins to appear among the real knowledge of the world. We must not be impatient because there is as yet no universal recognition of medical authority. It is the fault of the medical profession itself, that there is not, or, rather, the cause is to be found in the failure of medicine to become an exact science, so that medical knowledge as to the limitations of disease can be positive and exact. Dr. John W. Draper wisely said: "In medicine the quack only exists because there is doubt. . . . The practice of medicine must rest on an exact anatomy and a sound physiology. As soon as it is brought to this, empiricism will cease of itself. It will need no legal enactments, no ethical codes for its destruction." *

In the time of our Lord a rational system of medicine did not exist any more than hospitals, dispensaries, railways, or the telegraph. The Christian may find in this fact, possibly, an explanation for the pitiable physical conditions of the poor oppressed Judeans of the time of Christ.

As I have already said, there is now but one system that ignores all human knowledge and turns alone to the supernatural, the superhuman, the direct interposition of God without the use of human means for cure or, if not that, to the influence of mind over matter. While I am strong in the conviction that the medical profession, as at present constituted in civilized communities, knows more of the management and cure of disease than does any other set or sect of men or women, and that we may all, therefore, more safely trust that profession than our own instincts or knowledge; yet I freely admit that medicine is still an inexact science, which leaves much to be desired before it will be possible for every human being to live out his days untormented or summarily ended by disease. Surgery is fast removing such a reproach; but medicine, strictly speaking, remains to-day, from inherent causes, a fit stamping-ground for all kinds of error. With all this in view, it is in no impatient frame of mind that we should criticise the beliefs of those who would sweep away all that has been so laboriously collected by medical authority.

* "System of Physiology," Preface.

As scientific physicians, we ourselves reject much to-day that we believed yesterday. There is no orthodoxy in medicine, but we have reached a point of progress where we may say that we thoroughly know the gross anatomy of the human body, much of its physiology, although not all, the method of stamping out epidemics and the antidotes for many poisons and the natural course of many diseases. We have a positive cure in a large percentage of cases of serious affections, notably chills and fever, syphilis, many defects of sight and hearing, and many affections of the internal organs. In the study of germs, we are on the very border land of a great discovery of the origin of disease. This is no mean catalogue. The so-called Christian Science, the faith curers, the phrenopathists, the mind-curers have no such list. They desire only selected cases. They do not deal with tangible diseases, except with the self-limited ones, or with those that with the care of any good physician or without it, would be largely affected by the workings of the mind.

In this discussion, I may be permitted to adopt somewhat the form of a review of some of the writings of those who seek to overthrow the science of medicine. "Divine Law of Cure," "Soul and Body," "Esoteric Christianity," "Mental Therapeutics," by W. F. Evans, "A Statement of Christian Science," by Gestefeld, with the magazine devoted to the cause, are the authorities I have been able to consult. When writers of a certain class attempt to present an entirely new subject, and one that is counter to established opinions, they very often fill their volumes with an enormous amount of padding, with which no one has any particular controversy. This I have found to be true with regard to certain works in some departments of medical science. Unscientific authors, who have an entirely new theory to present, have a singular habit of devoting a large number of pages to quotations, records of experiments and theories that are not in dispute, while very carefully buried in the volume—sometimes so carefully concealed that it is difficult to extract it, we find the kernel of the new doctrine. It is as if they wish to disguise the dose. This to me is a suspicious circumstance in any presentation of a new subject. When a great reformer really has something to say—when a wise man with ideas which he believes to

be far ahead of his time, is burning to proclaim them, he has very little room for fine writing or for quotations from other authors on subjects other than those strictly pertaining to his views. The few quotations he makes are always pertinent, but his main strength is spent on his main theme. The writings of our Lord are a striking example of this. The Saviour quotes from the Old Testament Scriptures very sparingly, and then directly to the great theme. The grand doctrine of the Gospel beams out from almost every sentence of His own, and is to be seen in every action. So to come down to lesser reformers without inspiration. The abolitionists of the early part of this century, were very sure to make everything they had to say bristle with their arguments against the sin of slavery. They paid very little attention to incidental themes, about which everybody could agree, and when a Newton, a Young, a Faraday, or a Helmholtz has a great discovery to announce, he needs very few words, and those are his own.

I find that the writings of the faith and mind curers are filled with statements wrested from their authors—some of them not to be denied—but having no pertinence to the argument. Some of them are so placed that they actually distort the real views of the writers, who would be much surprised to find them as opinions used to advance the idea of Faith Cure. For example, the writer had no idea that he was advocating doctrines of Christian Science when he asserted that "the inner nature is the real manhood—the body the mere physical organism, constituting no essential part of his being and existence."

Some of the propositions laid down by Dr. Evans are:

"Its fundamental doctrine is that to think and to exist are one and the same, and that every disease is the translation into a bodily expression of a fixed idea of the mind and a morbid way of thinking." *

"So far as disease is a condition of the body, like matter it is only an appearance, a sensuous seeming, an empty show." †

"The treatment of disease, of that condition which is mental, whose expression or registration is physical, is both voluntary

* "The Divine Law of Cure," Preface.

† "Esoteric Christianity and Mental Therapeutics," p. 57.

and involuntary. Of what use or value, when the 'Science of Being' is discerned, is the old method of drug treatment?"

"Truth is harmonious. 'One truth agrees with every other truth,' or each manifestation of truth is harmonious with every other one because all express the same thing. When man thinks truth, then he will be harmonious in consciousness and not before. And harmony does not mean monotony by any means. Harmony in variety is the nature of infinite mind."

"As every conception of man is seen and felt by him; as every one is both external and internal, objective and subjective, the truth about himself—or a consciousness of himself as he is, instead of as he is not—can never be seen or felt till he thinks it. And as man's power to think is subject to nothing but its source, and the way he will use it, upon nothing but himself, it follows that man's consciousness of health or harmony depends upon himself only."

"Do you say, 'I shall be very unhappy and miserable if I cannot have' so and so? Serve you right if you are. What business have you whose birthright is 'dominion over all the earth' to declare or feel yourself dependent upon anything, time, place, circumstance or condition in this whole material universe?"

"It should be the aim of the physician to bring the remedial agency which he employs within the compass of the laws of human nature, for these are the 'power of God and the wisdom of God unto salvation.' The treatment described in this chapter gives to the so-called magnetic or psychic force an increased efficiency, and to its effects the quality of permanency. The phrenopathic method of cure founded by Jesus, the Christ, eighteen centuries ago, and by Him taught to His early disciples, will be revived in the new age upon which humanity is entering, and will receive an increased efficiency from the growing scientific culture of the world."

"If a patient is actuated by a sincere desire of recovery, and is predisposed to believe you, and trusts in you, and has no repugnance or antipathy to you, it constitutes an affinitive attraction for your higher thoughts and feelings."*

* I am sorry that I am not able to give the page and volume for all these passages at the present writing, but they may be found in the various works of W. F. Evans and his disciples, whose titles have been indicated.

"As the system of mental healing is prophetic of the termination of the reign of matter and sense, and the re-establishment of the dominion of the spirit." Much could be said to demonstrate the sheer nonsense of much of this, that I have thus quoted. I think, however, the bare reading of many of these quotations is their refutation. "So far as disease is a disease of the body, like all matter, it is only an appearance, a sensuous seeming, an empty show." "The essentially vital organs in the human body are the heart and the lungs, and these have an immediate correspondence with the mind. In fact, the fundamental correspondence between the mind and the body is seen in the correspondence of the heart to the love, or the emotional nature, and of the lungs to the understanding or intellect."* I take exception to the latter part of this statement. I do not believe that they have any immediate correspondence with the mind. There is not a boy or girl of fifteen years of age in the City of New York, who has been at all properly educated in the public schools, who believes anything like this. To say that the heart and lungs, any more than the liver, have an immediate correspondence with the mind, and that it is seen in the correspondence of the heart to the love or emotional nature, and of the lungs to the understanding or intellect, is to say something that is absolute and sheer nonsense. It hardly needs to be more than stated, that the heart has no more to do with the love of nature, than the leg of a table has to do with the thoughts of the person who is writing upon it. The emotional nature and the sensations of affection and love are not engendered in the heart. The heart is nothing more nor less than a great muscle, a great pump, which pumps blood to the various parts of the human body. A man may have a very large muscular heart, and have no emotions or affections that are worth consideration. But this reference to exploded theories of past ages, as if they were true, will be found to be very common among faith curers and phrenopathists.

In saying this, I do not for a moment lose sight of the fact that in a poetic language and in that of everyday life, the heart is still spoken of as the seat of the affections. But in so speaking, none of us have any idea of actually believing that the

* "Esoteric Christianity," Evans, p. 36.

heart has anything to do with our affections. It is no fair criticism of the writings of our Lord, to say that He believed these erroneous theories because He uses the current language of His time, in saying: "Out of the heart cometh evil thoughts." This is conventional language, and not at all scientific or intended to be scientific or literally true, although we all use it every day.

The human body, as true science or knowledge now says, is a great machine, dominated, controlled by a spirit by what we may call soul or mind. But the various parts have no essential spiritual or mental qualities, any more than the keys of a piano from which come the strains of a Beethoven, a Mozart, or a Chopin, have in themselves musical sense or feeling. It is only when the hand of a master touches them, that the inanimate physical structure becomes a medium for exhibiting the musical mind of man. Just so the great human machine in its component parts, neither in brain, heart, lungs or muscle, is not an inherent thing of life, but only when touched by the soul, the breath of God, does this brain think, the muscles move, the heart act, the stomach digest, and the liver secrete. How different is this from the renewal of the exploded notion that faculties, senses and affections and feelings and passions, are located in various parts of the body, that these parts themselves possess intrinsic qualities, other than mechanical ones. When the spirit, the breath returns to the God who gave it, then is this machine a helpless mass as impotent as the most magnificent steam engine would be without a furnace, stokers or engineers, lying in its iron case on the bosom of a great sea.

Let us now turn to some of the definitions of disease used by the Christian scientists. "Disease," says Dr. Evans, "is an abnormal mode of existence—in its radical significance, is a wrong way of thinking, or,—if you prefer to so call it—a misbelief." Let us carry this to its logical sequence. A human being has a decayed tooth. Its structure has been destroyed by the action of acids or some pernicious substance. Its structure is made brittle, finally breaks, and its inner tissue is exposed; it aches, the pain is profound. The aching goes on and from the increased flow of blood and tension, great swelling of the gum in which it is lodged, occurs. Finally pus forms in it, and the cul-

mination and relief of the agony is the outward passage of this pus.

Now all this is misbelief—there is no body, all this is a wrong way of thinking, or, as Dr. Evans puts it, "a boil is not an evil, much less a disease, but a good thing." Perhaps Job, who was authority on boils, would have been comforted, as he sat among the ashes, if he could have heard this doctrine. Take another case. A man or woman, from the lapse of years and inevitable decay that comes with the years, suffers from impaired sight, because the crystalline lens of the interior of the eye, which should in a normal condition be transparent, becomes opaque. Thus the man cannot longer see well, because light cannot enter through an opaque medium. But Christian Science steps in and says: "No, there are really no substances, no corporal existences in the world. Everything is supposed to be, but nothing is. All the objects of nature are phenomena or appearances, as Hegel, Fichte, Berkeley, Swedenborg and all the idealists affirm. There is no opacity of the lens. There is nothing wrong. The poor, blind patient is only suffering from misbelief." It is to be noted that in the arguments of the Christian Science advocates, there is a great deal of reference to the Berkeleian philosophy which, in Dr. Evans' hands, comes down simply to a belief that nothing is real. Everything is merely thought to be so. This is rather more than idealism. There is little but the name in the comparison of Bishop Berkeley's lofty conception of a "universe inconceivable without mind," and the commonplaces of the adherents of the Faith Cure. Certainly there is nothing without mind and soul. The body, as we have seen, is but a clod without it. It is the musical instrument without the touch of the vanished hand, yet the instrument is real and may suffer harm, become so damaged that no hand can again cause it to emit a musical note.

Another specimen of the reasoning of the Christian scientists is the following: "If a person by some means conceive the idea that a harmless tumor is a cancer, and the thought becomes fixed, nature in order to maintain the unity of the body to the soul, actually changes the form of the tumor and transforms it into a cancer."* Now does any sane person believe this? Does

* "Divine Law of Cure," p. 298.

any person in his right mind actually think that a case ever has been produced, or can be produced, of a person's imagining a swelling which was not a cancer to be a cancer, until it finally became one? All this is the barest assertion. I will freely admit that a great mental distress, a great anxiety, an overwhelming sorrow, may conceivably so impair the workings of the body that disease may result. But there is no proof to be found that any change of human tissue from what is called benign to malignant, can be made by fear or dread. Dyspepsia, insomnia, headache, many of the functional affections of neurotic persons, may be so caused; but how different is this from changing the constituents of a tumor so that from a benign growth it becomes a cancer, and how easy to understand the functional effect of the emotions upon the body.

The scientific physician of the present day by no means denies that mental influences may and do cause disease. He even admits that great grief may bring the system into such a condition as to cause it to fall an easy prey to typhoid fever, to consumption or other diseases. It may be conceded that physicians are sometimes too unmindful of the influence of mind on matter. but none of them deny the existence of mind nor of matter, Even if a man on the ultra physical side of the question has said that the brain secretes thought as the liver secretes bile, this is not the accepted scientific conception of the day. People may imagine themselves ill, they may have many so-called nervous symptoms, but no imagination without a physical action, cuts one finger from the hand or adds one cubit to the stature. Sorrow and sighing may impair the working of the human machine through the blood, or the nerves, or the inactivity of the muscles. Worry and evil passion may in the same way influence the proper working of the machine, but a real machine it is, and no amount of thought or willing can effect any such changes as those claimed by the faith curers. So hope and happiness may cause the blood to flush the cheek and stimulate or feed the nerves and enable them to activity, which may lead to cure. But no hope, however strong, no faith, however fervent, can replace a severed limb or remove a mote from the eye. If mind and faith be not omnipotent, if they cannot do all things, they have no place alongside of

that higher faith which our Lord said should remove mountains and cast the sycamore tree into the sea, that faith which has never as yet been exercised except by Him and His immediate disciples.

The great field of the faith or mind curers is in the domain of diseased structures that cannot be seen, while they ignore fractures, severed limbs, blindness, deafness, losses of structure in the human body, and so forth. In the great field of chronic disease, quackery has always played a great part. In the first place, much of the so-called chronic disease is not serious disease at all. Many thousand suffer from it, and yet do all their work. Many a brave and strong man ignores headaches and coughs and sleeplessness and neuralgias, and does his work all the same. Some timid souls, on the other hand, will ignore nothing physical, but get to bed and consult a doctor for very trifling ailments. This is probably due to weakness of nervous structures or want of tone of their muscular fibre. These latter people, if they have not well-balanced minds, fall a prey to Christian Scientists and mind curers and regular doctors with infallible cures.

The avoidance of tangible affections by faith curers is a circumstance that tells unanswerably against their doctrines. I was once sent to see a lady who was living in what was called a Faith Cure establishment in this city, in order that I might, if possible, relieve her from an impairment of hearing. This I found to be chiefly caused by a collection of wax in the outer canal of the ear, which was easily removed. The removal caused great improvement in the hearing. I never had been in a Faith Cure establishment before, and I confess I was somewhat surprised that I should have been sent for. I asked: "How is it possible that if without the use of any means except prayer to God, internal diseases are cured, affections of the organs that we cannot see, that those that we can see, and that are susceptible of relief by the means of the ordinary physician, believing and unbelieving, cannot also be cured by prayer or by the mind's concentration?" It is a terrible shock to the believer in this system to think that God can cure a case of disease of the liver or of the nerves, and will cure it by the use of the prayer of

faith alone, but (and I mean to speak reverently) He will have nothing to do with a case of deafness.

I have seen another case like this in a hospital where I attend. We once offered in this hospital to turn over a certain number of cases for the Christian scientists to work upon according to their system. If they can relieve the cases that now visit us and are relieved and often cured by human means, we will abandon our whole practice to them.

This cure is said to have been founded by Jesus, the Christ, and by Him taught to His early disciples. It is predicted that it will be revived in the new age upon which humanity is entering. But note the miracles that our Lord performed. He healed "all manner of diseases." The moderns select their cases. The blind do not see; deaf ears cannot be unstopped. In the Gospel of Matthew, I ask you to note the repeated statement, "all manner of diseases," "all them that are sick"; and although at times he stated "According to thy faith be it unto you," it does not appear but that He healed multitudes, contrary to what Dr. Evans states, who had no particular faith, but whose infirmities moved His heart.

If an accident happens and a man is blown up and dismembered, why not restore him to soundness by thought and prayer? Christ made a man see who was blind from his youth up. Christ quenched an issue of blood that had been a disease for years. Christ healed many blind and deaf and lepers. He raised the dead. There were no limitations in His cures, no selection of cases. Once cure any of the hopelessly or curably blind that apply to our eye infirmaries, once restore a dissevered limb, once let the Christian Scientists cure the cases pronounced hopeless by medical authority, and the whole world would turn to them. It is not that the Christian world is wanting in real faith. But the miracles are not performed. As things are, sensible people prefer the imperfect working of the science which God has allowed to wonderfully develop in the last two hundred years to Faith Cure or phrenopathy.

These Christian Scientists cannot ignore the plain and logical inference, that if Christ conferred the power of healing the sick and cleansing the lepers upon those who succeeded His original

disciples, that He also gave them the gift of tongues and of raising the dead. If the true Christian dispensation involved the one, it also does the other. Dr. Vincent has put this argument very strongly in his answer to Dr. Stanton in the *Presbyterian Review*.

While Christian Scientists lay great stress upon a close imitation of our Lord in the treatment of disease, in one important feature they differ from Him most markedly. Jesus went about healing all manner of diseases, but He certainly never alluded to the subject of compensation either for Himself or for His disciples. One of the authorities of Christian Science in a chapter upon "Directions for Treating," says:

"If diamonds could be had for the asking they would be soon cast aside as worthless. One is not to cast pearls before swine to be disdained, trampled upon, because the swine cannot comprehend their value. All who give their time and honest endeavor to this work are entitled to that compensation,* which shall ensure them their time to do this, and all who are the subjects of their endeavor are their legitimate reimbursers."

That certainly is a delicate way of putting the fee question, but it draws quite a line between the practise of the early Church, to say nothing of that of the Lord and His disciples, and that of the faith and mind curers. These faith and mind curers, these phrenopathists or Christian Scientists profess to get all their methods from those who went about the country preaching the Gospel of the kingdom, without a place often to lay their head, and call very closely to account as faithless, unworthy Christians those who do not believe that a close imitation of the physical methods of the Lord and His Apostles is intended, is necessary or possible for Christians in the nineteenth century, while they set themselves up in offices and parlors and consultation rooms, "transfer," to use their language, "the dominant idea of the healer to the patient," but for a fee. This is rather different from the methods of the early Christian Church as proclaimed by St. James, of which the Christian Scientists are apt to speak as the example for all faith cures. Then the elders of the Church anointed the patient with oil and prayed

* Gestefeld's Statement of Christian Science, p. 244.

for him, prayed, I am sure, if it be the will of God, may this patient be healed. Certainly no harm and much good will always be done by the prayer of faith, but "the transfer of the dominant idea from the healer to the patient" is necessarily not allied to this. There is actually no more resemblance to the healing of Christ and His disciples in the methods of faith cures than there is in the incantations of the North American Indians, or the antics of native Africans over their sick patients. It is a plain distortion of Gospel truth to make all things turn upon the curing of disease. The chief object of Christ's coming as revealed in the Gospel, was not to heal the body, to give the gift of prophecy, or of tongues, but to heal the soul.

The healing of disease was but an incidental part of our Lord's career. It was at a time in the world's history when the avocations of men were much narrower than now. Even their diseases and accidents were different. The fulness of time in which the human body must be studied as an organism and treated as a machine, had not come any more than had a knowledge of the motive power of steam or the great force of electricity, nor the development of the science of music. The Divine Master was moved with compassion as He saw the sick, the blind, and the lame in the waiting multitudes, and in an entirely exceptional way, evidently one upon which no stress was laid compared with the healing of the soul, He did heal the bodies of all those who were brought to Him or who came under His notice; even if they touched the hem of His garment they were made whole. But it was not for this that He came to the earth. He came to relieve mankind from the burden of sin. There is evidence that He did not consider miracles the most pleasant parts of His work. "Except ye see signs and miracles ye will not believe." There is evidence also that however great might have been their faith, they still suffered physical pain, scourgings and finally martyrdom, and that by no thought of theirs, filled as they were with faith, animated as they had been by an actual life with the Divine Master, were their sufferings made unreal, or in the language of the Christian Scientists, considered to have no existence if they would only think they had none. St. Paul certainly was no Christian Scientist, and no Prohibitionist either

when he said to Timothy, "Be no longer a drinker of water, but use a little wine for thy stomach's sake and thine often infirmities."

But however conclusive this kind of argument drawn from the Scriptures may be against Christian Scientism, my chief endeavor in this paper is to present the view of a physician of the nineteenth century as to the possibilities of cure through faith in Christ, or by purely mental processes. It is my earnest belief that a physician may be a sincere Christian, and yet rely upon the use of human means for the cure of disease. That these human means may be sanctified and consequently invigorated by Christian faith, he is only too glad to concede. Nay, further; he has abundant opportunities to testify as to what human hope and pluck may do to resist disease, and become more instrumental often than drugs. No Christian physician, or indeed, perhaps, no scientific physician, be he believer or unbeliever, considers the human body to be a machine in the sense that he thinks a locomotive one, but rather that the human body, until the breath of life leaves it, is an engine with a mind. It is a locomotive with an intrinsic engineer.

This doctrine that there can be no real pain, that there is no sickness if there be sufficient faith to overcome it, that there can be no real death (for that is implied in these writings) if one be sufficiently filled with faith, is utterly repugnant to the teachings of the Christian religion. This teaches us that man is born to evil; that his nature is one that is decay; that his years are threescore years and ten; and if, by reason of strength they become fourscore years, they are labor and sorrow; that disease comes alike to the just and to the unjust; that sorrow, physical and mental, is a part of the means used for the purification of human nature.

What is the doctrine of physicians, educated physicians, with reference to disease and injury occurring to the human body? There is an old proverb that where there are three physicians there are three atheists. Whatever of truth there may have been in this, when Christian faith was overloaded with superstition, there is no truth in it now. In this country at least, the proportion of physicians who believe in a personal God,

who accept Jesus Christ as His manifestation in the flesh, who trust in Him for their salvation, is as large, in my opinion, as that of any other educated class, and I do not know but what it may be larger. But yet we are not believers in healing by faith or by prayer alone. We do not deny,—we never have denied,—we cherish ourselves, we encourage in others, the belief in the effect of the mind upon the body, and unless we are very stupid or very foolish, we endeavor to supplement all our other efforts by the encouragement of all that which will stimulate, through the wonderful nervous system, the natural processes of the body, so that a cure may be effected by a throwing off of that which is harmful. We believe that it may be possible that there is a time coming when human enginery will be so perfect, when human wisdom will be so profound, that man shall live out his allotted time without accident and without disease, "when no inhabitant shall say, I am sick." But until that time comes, and accidents, and poisons and disease continue, that in human wisdom there will be found remedies which may mitigate the consequence of these things. We do not believe that it is now possible to ignore the structure and the functions of the human body, that there is any such thing as ignoring a toothache or fractured leg or a broken skull, by simply thinking they do not exist.

To adopt the views of the Christian Scientists is to throw away all the accumulation of human knowledge. We find in Scripture nothing that in any manner proclaims against the accumulation of exact knowledge. There has never been a conflict between the Bible, fairly rendered, and science. There has never been a conflict between true religion and science. "Yea, if thou cry after discernment, and lift up thy voice for understanding; if thou seek her as silver and search for her as for hid treasures, then shalt thou understand the fear of the Lord and find the knowledge of God." The true Christian Scientist, humbly exploring the infinite domain of knowledge, welcomes all exact knowledge as leading to the fear and service of God.

In closing this dissertation, written in the few leisure moments that occur in the life of a physician in a great city, and which I fear is utterly unworthy the occasion and the

audience, I am tempted to turn from the argument as to the cure of disease by faith or by thought alone, to ask why do these evolutionized idealists of the nineteenth century, confine their labors for the mitigation or relief of human suffering to the cure of disease alone. There are other important sources of woe to the human race. Why is Christian Science not made available to fill other wants and correct other conditions that may lead to sickness and suffering? If a person can think that he has no disease and thus cure typhoid fever, the farmer can think that his field is not overrun with nettles, that it is planted with corn. He can think that the corn is grown; he can think that he has gathered the opened ears into his barn; he can think that they have been ground in the mill; he can think that he has eaten the flour, or can think that his body is nourished. And all the useless details of ploughing and sowing are utterly unnecessary. If men and women can think away a headache caused by a tumor of the brain; if they can think out of existence a cancer; if they can think themselves by faith into the enjoyment of food that they do not possess, the day of the absence of disease, poverty and pain draweth nigh. But if they can think this, they can think out the inventions of the world without inventing them. They can think out the telegraph, telephone and phonograph, and can clean the streets and purify the air of our very filthy city. They can avert shipwrecks, railroad accidents, and crime. It cannot be that it is disease alone that is under the power of purified Christian thought and concentrated human mind. The poor man can think himself warmly clad in the howling blast, he can think his fire renewed by invisible coal, and sorrow and sighing have passed away.

But our human experience and human knowledge but confirm the doctrines of the Holy Scriptures. Neither of these teach any immunity from physical ills, any aid for them, any achievements in civilization and progress except through the use of means, physical means, given to man to use by his Creator. We may believe that Christ suffered in all things, even from pain and sickness, and yet without sin. It is the great boon of the nineteenth century that with the wondrous growth of the world, the accumulation of its millions of people, the multiplicity of its inven-

tions, life has become easier and longer, human sorrow has been mitigated, and all this without any destruction of the hope of immortality, which is to be the crown of those who endure to the end.

It is only in that immortal life that "sorrow and sighing shall flee away." Not in any vulgar putting away of our present evils, not in any vain imaginings that they have no existence, but in a real, a scientific endeavor in the fear of God to avert and mitigate them or in patience to bear them, will the true Christian Scientist do his work.

REALISM.

[Contributed to CHRISTIAN THOUGHT.]

BY PROF. CLARENCE U. CARRUTH,

Highland University, Kansas.

A CLEAR understanding of terms is essential in the investigation of any system of philosophy. One source of difficulty in philosophical study is the variety of meanings which the same term naturally assumes.

The name "Realism" has been applied to systems of philosophy which have no intimate relation with each other. The Realism now to be discussed may be designated the Historical or Ancient, and must not be confounded with two other doctrines to each of which the name has been given. The first of these, the Realism of Sir William Hamilton, concerns the existence of the material universe. Defining Natural and Hypothetical Realism, he discards the latter and advocates the former. The terms "Presentational" and "Inferential" would more exactly indicate these two forms of doctrine. Presentational Realism is one department of the general doctrine of Presentationalism, which asserts that the mind perceives certain classes of things immediately. Hamilton's Realism refers only to the objects of sense-perception, not to those of consciousness and of concomitant perception.

Again, the Realism of Dr. McCosh is essentially what has been known as "Intuitionalism" under a new name. This doctrine includes two points: First, The reliability of presentational perception; and second, The reliability of our immediate perceptions of necessary truth or of necessary relations. "Realism" is scarcely a good name for a general system of philosophy, and appears especially inadequate for a system which recognizes hypothetical intuitions. The term in its natural significance is too narrow to cover the ground. A better name for the system which maintains that man's immediate perceptions, and all fair deductions from them, are reliable, is "*Perceptionalism.*"

Historical Realism is the doctrine that universals, or objects of general conceptions, as such, really exist. This ancient view finds its earliest expression in the Eleatic doctrine of the unity of being and in the teachings of Parmenides respecting τὸ ὄν, τὸ ἕν and τὸ πᾶν. Plato, however, first affirmed the reality of "ideas" (or universals), as the fundamental postulate of all true cognition. He recognizes a world of eternal and unchangeable essences in which τὸ καλόν, τἀγαθόν, τἀληθές are the only true and knowable realities, the only proper objects of science (ἐπιστήμη) or true knowledge. Particulars are ever changeable and at the most can only support opinion (δόξα). Plato distinguishes between the permanent, unalterable Entia and the transient, ever-fluctuating Fientia, "which come and go and never really are." Particulars, however, though distinct and separate from the universals, have nevertheless a certain participation in them by virtue of which they become half-existent and half-cognizable, but they never attain to full reality and cognizability. Such are the features of Plato's Realism.

Aristotle incorporated Realism with his doctrine of form and matter (εἶδος καὶ ὕλη). He held, however, that universals do not exist separately from individuals.

Porphyry, in his *Εἰσαγωγή* (or Introduction to Aristotle's Logic), said certain questions concerning universals were too profound for him. These questions were: "Do genera and species exist in the nature of things or in mere conceptions only? If they exist, are they corporeal or incorporeal? Do they exist separately from sensible objects or not?"

Thus ancient philosophers continued to the last divided between the doctrines of Plato and of Aristotle.

After the Dark Ages (A.D. 500–1000), we find Realism discussed by Roscelinus and Anselm, in the eleventh century. Roscelinus maintained that there is nothing general but names, and was therefore called a "Nominalist." After him, Abelard introduced the doctrine of "*universalia in rebus*," which prevailed until towards the close of Scholasticism. The great theologians of the twelfth and thirteenth centuries, Albertus Magnus, Thomas Aquinas and Duns Scotus, developed the doctrine of Abelard and applied it in the philosophy of religion.

In the fourteenth century, William of Occam, an Englishman, revived Nominalism, asserting that singulars alone exist, and that universals, even as mental conceptions, are wholly without reality. His views, though favored at the universities, caused great disturbance in Church and State.

Locke (born 1632) was the first who distinctly taught "Conceptualism." According to him we have general conceptions, but universals do not exist. "All things that exist are particulars." Hobbes, Berkeley and Hume were Nominalists; Spinoza, Schelling and Hegel followed Plato.

Occam's position is undoubtely right in the sense that a general conception, in its own nature and aside from its significance, is individual and not general. For, as Boethius says, "*Omne quod est, eo quod est, individuum est.*"

The long-continued sway of Realism in the minds of philosophers is due partly to the fact that Pantheism, to which Realism leads, has always been a fascinating theory. But the Realistic doctrine was by no means a mere sentiment. It was supported by powerful arguments which misled thinkers and which remained through successive centuries without satisfactory refutation.

Do universals exist? Let us consider the arguments in favor of the affirmative of this question and endeavor to arrive at a just understanding of them.

First, Realism appeals to *our common use of language.* We speak of universals in precisely the same language that we use in speaking of existing individuals. When we say, "This man is mortal," no one will dispute that the subject of our thought is actual. In exactly similar terms we say, "Man is mortal." Why does not our cognition in this case have a corresponding *cognitum?* The Realist claims that our language equally in each case sets forth reality.

This argument, however, is only presumptive. A form of language, in itself, proves little. The beliefs of mankind are strong presumptive evidence of corresponding realities, but furnish no absolute proof. If it could be shown that some form of language had its origin in a common belief that universals exist, the argument would be forcible; but this cannot be done. The forms of language are governed by necessity. "Our

thoughts and statements as about universals are secondary modes of mental action, referring to our thinkings concerning real objects, yet not of themselves setting forth any reality." To say, "Man is mortal," does not assume the existence of an universal man. It is simply a method of stating a truth which will apply to every individual man. All the force of all general statements lies in their applicability to individval cases. When we speak of goodness in the abstract, we do not mean that it exists, but that many beings individually are good. The argument from language does not establish the doctrine of Realism.

A second argument is based on the general truth that *every thought has an object*. We cannot think unless we think of something. But we think of universals; therefore universals exist. It must be remembered, however, that we can think not only of a thing but also *as if of a thing*. We think of "universals" as we do of "ideal objects." Neither has real existence. Indeed we do not even think of universal entities as such. In the example given, we do not conceive of an universal man, but only think a thought which applies to a large number of individual men.

Thirdly, the existence of universals is claimed on the principle, "*Non entis nulla sunt praedicamenta.*" In other words, only things which exist are the subjects of predication. But universals are the subjects of predication. Therefore universals exist. In answering this argument, we must take into consideration two kinds of existence, if we may so speak, the actual and the supposed. It is not true that there must be actual existence before there can be predication. There must, however, be supposed existence. We often think of objects purely ideal and non-existent as if they had existence, and philosophers who overlook this phase of mental action are constantly led into error. So in speaking of universals, we assume that things may exist corresponding to them and construct our predications upon that assumption. When we say, "Wood is combustible," we make a predication which would be equally true if all the wood on the surface of the earth were destroyed.

Fourthly, Realism is argued from the fact that *individuals are often said to have a general nature.* Cæsar differs from Pompey, but both have the common or general nature, "man,"

and so do all individuals of the race. All individuals of any class have the "common" attributes of the class. But how can individuals have a general character unless that general character exists? This argument is a fallacy of confusion. Humility may be a characteristic of two different persons, but it has no existence except in the individual humility of each. "General" and "common" mean only that a similar attribute shows itself in both cases; in each case it has existence individual and separate. The existence of a general nature is a mere thought pointing to the existence of the individual natures.

Theology, again, *is used in support of the Realistic theory.* Albertus Magnus and St. Thomas claimed that Realism philosophically explains the doctrine of Creation, and later theologians use it to explain representative responsibility. They say that God, in Adam, created, not an individual man, but the genus "*homo*." The individual is a mere "*modus existendi*" of the species or genus. The species is the substance; therefore the sin of Adam is the sin of the species and of every individual of the species. Every individual is accountable for the original sin, for he actually sinned in Adam.

But this theory is untenable. It is contrary to our consciousness. Every man is conscious of his own individuality. No one is conscious of any literal identity or community of being between himself and other men. No one is conscious of having sinned in Adam. This theory also does not justify our punishment for the sin of Adam. If man actually sinned with Adam, his punishment can be vindicated only on the ground that he consciously and intentionally participated in that sin. A sin of which we are unconscious as our own act cannot be a ground of penal infliction. Finally, if this theory were true, we would be responsible not only for Adam's first sin but for all his subsequent sins. Perhaps also for the sins of Eve.

A sixth argument refers to *the existence and operation of the laws of nature and the laws of being.* For these laws are general things. This argument is really one form of that drawn from our use of language. In speaking of a general law or mode of action, we describe in general terms what exists only in individual cases. No law of nature exists except as the mode of many

individual operations. The term "law of gravitation" indicates only those actual powers which manifest themselves in every case in which the gravitation operates.

The falsity of Realism may be established not only by undermining the ground upon which it rests, but also by positive arguments showing *its inconsistency with well-founded views*.

One of the most powerful arguments in disproof of Realism was advanced when Plato himself in the Parmenides proved the impossibility of any connection between particulars and universals. "The 'idea' or 'form,'" he argues, "cannot be entire in each of its many separate individuals, nor yet is it divisible so that a part can be in one particular and a part in another. Take the forms 'great,' 'equal,' 'small.' Equal magnitudes are equal because they partake in the form 'equality.' But how can a part of the form 'equality' less than the whole form cause the magnitudes to be equal? How can the form 'smallness' have any parts less than itself, or how can it be greater than anything?"

"Again," he continues, "we can know nothing of forms if they exist, because forms can only correlate with forms and particulars with particulars. Thus the form of each variety of 'cognition' correlates with the corresponding form of 'truth,' and we as individuals do not possess the form of 'cognition,' and our individual cognition cannot reach the form of 'truth.'" In short, the father of Realism acknowledges his universals to be inconceivable and incognizable.

But the great argument against Realism is that *all things that exist are individuals*, and therefore no universals exist. As a matter of fact and concomitant perception, we perceive the individuality of every object that we perceive. Not only so: we perceive that the individuality and the existence are necessarily connected with each other. This is an immediate and necessary perception. Generalizing this truth, we say that in any case of existence the entity must be an individual. But if individuality is a necessary characteristic of entity, then general objects cannot exist because the essence of the general is to exclude the individual.

Realism is in many respects a noble doctrine, and has given

an elevated form of faith to many earnest minds. It comes down to us honored by the advocacy of philosophers in almost every age. Nevertheless, it is only a pleasing delusion, and should be rejected by those who would clearly perceive the truth. Theory and speculation are useful only so far as they lead to the rejection of error and to the gradual upbuilding of a system of philosophy from which every imperfect stone has been removed. Thus, after the error and confusion of ages, will rise at last a grand temple of truth, not the work of one hand, but toward which every earnest seeker after truth will have contributed his part.

IN THE MIDDLE.

[Contributed to CHRISTIAN THOUGHT.]

BY GOUVERNEUR M. SMITH, M.D., NEW YORK.

CRADLED in an ancient time and nurtured in a Latin tongue, a thought has flashed through centuries, reached this day, and still sparkles in that small, aristocratic and closely incorporated coterie, known as "Proverbs." "*In medio tutissimus ibis.*" "You will go most safely in the middle."

The idea, in varying expressions peppers ancient and recent writings. The modern sage, as well as his untutored contemporary, in paddling their respective canoes through life, each finds occasion for these pithy words.

The maxim is traceable to Ovid. His grandmother may have whispered it in his ears, as she fondled on her lap her precocious young descendant. Properly construed, the saying is a safe guide, and worthy of perpetuation. Rashness is folly, but laudable aims at remote possibilities are natural to the mental economy, and such aims should be cherished rather than repressed. The axiom as so widely, popularly construed, however, is a hamper to intellectual progress, and it would be charitable to ascribe its origin to the Mother Goose philosophy of a classical period. There is in man's nature an inherent spirit of inquiry. Knowledge can only be acquired by dint of hard work. Man with an anxiety to learn, has also in his character a tendency to

a restful mental inertia. Inertness is a formidable break upon human progress.

Religion, science, literature, art are calling for athletic activities. The world has thus far produced but Lilliputian giants. New paths are to be cut, loftier heights attained, sublime views of the past with fresh vistas are to be opened, hidden truths to be mined, and ingenuity, now merely budding, has yet to ripen.

A caustic nip on mental development tinges the writings of well known authors. Milton in his "Paradise Lost," represents the angel Raphael, in responding to the inquiries of Adam, as saying:

> "But whether thus these things, or whether not;
> Whether the sun, predominant in heaven,
> Rise on the earth, or earth rise on the sun,
> . . . . . .
> Solicit not thy thoughts with matters hid."

Prior, not to be outdone in smothering mental yearnings, has said:

> "From ignorance our comfort flows,
> The only wretched are the wise."

Thomas Gray, in the same strain, wrote those oft-repeated lines:

> "Where ignorance is bliss,
> 'Tis folly to be wise."

These weedy thoughts of great men take root in countless hearts; the sayings are popularly quoted, and take priority over the higher sentiments of the same authors. Shakespeare has said "ignorance is the curse of God; knowledge the wing wherewith we fly to heaven"; but this passage is not a very familiarly cited proverb.

In the middle! Greatest safety! The truth of this assertion depends somewhat upon circumstances. A voyager, while passengered on a frail vessel in mid-ocean, does not experience a feeling of cheerful security. Should a traveller sink in the ocean, and being midway between the snapping waves of the surface and the untableted cemetery at the bottom, though in a large vessel, and surrounded by a hundred companions, his ebbing reason would declare the situation critical, and dying thoughts decide it as being profoundly hazardous.

In circumnavigating the world the explorer finds an equatorial belt midway between arctic and antarctic regions. Here he discovers vegetation a monarch, his associates slimy and venomous reptiles, and the atmosphere poisonous from paludal exhalations. His life policy has warned him that such central position is not a propitious one.

The sun is the centre of our solar system. In material affairs, it is grand to be the sun ; but woe would betide a man if he could examine the sun too closely, — "distance lends enchantment." Sunlight, ordinarily so salutary, at times may be scorching, and over-exposure to it, even at the distance of millions of miles from its source, may induce sun-stroke. If it were possible for man to explore the central orb, cremation would reward his curiosity, and cremation is dreaded in time and feared for eternity. If even adjacent to such centre, a wretched mortal by a rapid process of evolution would be converted into an inanimate bit of toast. Omnipotently essential as is the centre of the solar system, there are uses for its circumference, and also for the worlds widely scattered through space far away from the centre of their orbits. The sun gathering the planets into sedate, quakerly courses, permits friskiness in the comets, and each speeds without hazard to its remote aphelion. From a study of astronomy it seems that peripheral wanderings are safe.

The magnetic needle poised on its centre points to the poles. There could be no centre, if there were no extremities ; no extremities, if no centre. Extremes and centres should be on the best of terms, no rivalries, no jealousies ; they are absolutely dependent on each other. The needle points to the poles. The polar regions are not popular localities, they are not even favorite resorts in the summer season, but the needle points thitherward. The poles are the ends of the axis of the globe. The centre of that axis lies buried thousands of miles in the heart of the earth. Engineering skill has not attempted to tunnel to that hidden spot; and such burrowing if ever initiated would never kindle human enthusiasm, like the exploits of a Franklin or a Kane. The uninviting poles are more accessible than the centre of the earth ; the compass encourages to polar rather than to central

observations. Guided by the needle, man will not halt till his foot rest on, or over one of the poles and until he has spliced to the earth's axis a standard, floating some national ensign, to commemorate man's achievements over apparently insurmountable obstacles.

Centres, on general principles are not to be disdained, for as has been said, without centres there could be no extremities, no peripheries. Centres however have been sufficiently lauded for ages; the nineteenth century not only glorifies the core, but also worships outlying confines. Man has his centre of gravity, so also has every material object. The boulder possesses it, and in this respect, at least, man and the boulder are twins in nature; but the boulder follows the old Latin motto and remains perched on its centre of gravity. Man, on the contrary, peripherates and can dance, leap and somersault without losing his balance.

Man requires in addition, another sort of centre of gravity; this centre being *principle*. Around this axis man's thoughts and actions can usefully and joyously gyrate in multitudinous ways, without disaster. Man thus adapted is a glorious spectacle, a triumphant system of co-ordinated centripetal and centrifugal forces. What a grand clarion note was the one sounded in the old Greek tongue, "press toward the mark for the prize." Such exercise leads to moral, mental and physical health and strength; intensely tending to a centre, but at the same time active in all activities.

The earth, in its grand annual sweep round the sun, is busy, each second of its time, in its magnificent daily spin on its own axis. But the earth is not the same old earth that it was at its creation. It sped through space, and circled on its axis for countless ages before it was fitted for man's occupation. During the few thousands of years that man has inhabited it, as well as before, the earth has kept on daily and slightly altering its face, re-shaping its conformation. Such changes and betterments are to continue, slowly tending to some grand ulterior result, hidden from present human comprehension. *Pari passu*, with such earthly changes, man is to progress. With each diurnal twirl of the earth on its axis, man should give an equally important kaleidoscopic turn to his own life. There are glorious sequellæ

in store for this orb, and for its inhabitants, which prophecy shrinks from predicting.

The Latin maxim, quoted in the beginning of this article, is too tame for this generation. It may still find fitting abiding place within the high walled acres of China and other isolated regions, but time will eradicate the thought from every clime. To lounge around the present portals of knowledge, content to profit merely by the experiences of the past, and of to-day, is conduct only suited to meticulous dunces. We have not as yet approached, or even had a glimpse of the middle of the possibilities of human intelligence. Man is not mentally rich enough to lounge; his mental bank account, at the best, will always be scanty; he will never be able to retire on his intellectual wealth.

A large mass of the inhabitants of our globe are still, comparatively speaking, mere dolts. The more enlightened nations are only pioneers in advancement. Man's brain, under the most favored circumstances, is now but getting into trim for work. Science is a mere babe, engineering in its infancy, art but an embryo. Christianity, though nineteen centuries old, is yet in its swaddling clothes, its riper years to witness its grandest triumphs, as adult years witnessed the chief glory of its Founder.

As all the nations of the world become gradually equipped for mental vigor, powers now latent will aid at the lever, and the weight of ignorance now covering all mankind will be largely removed. The uncivilized of to-day are to join the ranks of the leaders in thought; their foreordained condition being as yet unfulfilled. Human interests, now plural, are to be unified. The nearer the approach to universal mental activity, the grander will be the development of cerebral capabilities.

Among the untutored races, we now find many traces of genius. These races, studied in their present state, exhibit the fact that their physical qualities too often predominate over their mental traits. Close scrutiny, however, discovers in them rudiments of mental dynamics, peculiar in their nature, but which are suited under cultivation to become potential factors in elucidating and solving cosmical, ethical and other problems which are now bewildering. These people are now so immature

that they cannot even rank as recruits, in the cohorts of brain-workers.

When, in the world's roll call, Europe, Asia, Africa and America respond alike and are all found massed into a united army, with mental batteries all arrayed against ignorance, then will appear an intellectual and physical human development, such as time has never seen. The general human condition and enlightenment of that era, will be of such a high order that our own day, with its boasted advancements, will appear as a mere twilight of the dark ages.

Such period is far remote; it will be long before the time arrives when,

> "No more shall nation against nation rise,
> Nor ardent warriors meet with hateful eyes,
> Nor fields with gleaming steel be covered o'er,
> The brazen trumpets kindle rage no more,
> But useless lances into scythes shall bend,
> And the broad falchion in a ploughshare end."

Until such peaceful epoch arrives, a hallowed civilization is to creep until it has girdled the globe. Such time is sure to come. Divine prophecy has declared it, secular history affords premises from which to draw the same conclusion. The philosopher of to-day must be an optimist.

Among the advanced thinkers of our day, the votaries both of religion and science are seeking for new lights and new interpretations to guide them. They earnestly believe that scholarly investigation leads to the general enlightenment, and that intelligence in a people denotes safety, and ignorance means danger. Religion and science, literature and art, by a world-wide, concurrent labor, from the equator to the poles, are to induce a new type of manhood, an evolution into a higher state of human existence.

In elevating the masses at present, it is often said of certain ones, that they are educated above their spheres, and being incapacitated by circumstances from pursuing the higher departments of knowledge, for which they may have a taste, that they are unhappy and unfitted to fulfil the humbler occupations of life. Civilization, to a great extent, will obviate this prevalent objection of our day. Manhood is to be raised to a higher plane.

It is not presumable that all individuals will be *equiscient*, but in the elevated status of the human race, such inequalities will be recognized, utilized and appreciated.

In hastening the approach of the time, when a universal co-operation of thought shall prevail throughout the world, the enlightened nations of to-day have a difficult task to perform. The American people, of all peoples, are the best equipped to promote the herculean labor. This statement, superficially interpreted, might be regarded as centennial braggadocio. The United States have the extraordinary power of readily assimilating heterogeneous masses of mankind into a homogeneity which is bright, law-abiding and devotional. Such assimilation cements the family bond, induces love of country and love of mankind, and gives a strength to scatter world-wide wholesome seeds to take root in every clime.

What are the limits of human understanding? The nineteenth century glistens, as the brightest one since the genesis of man, and each additional one will glisten more brilliantly. Imagination cannot picture the grandeur of this earth and its inhabitants, at the end of the next decade of centuries. Man, growing in grace, and getting understanding, is to approach nearer the image of Him after whom he was formed.

NATURAL IMMORTALITY.

[Contributed to CHRISTIAN THOUGHT.]

BY GILES H. MANDEVILLE, D.D., NEW YORK.

THE subject does not call me to discuss the question of the dual or tripartite nature of man: whichever be true, our ordinary usage makes the word *soul equivalent* to the immaterial part of man, of which deathlessness is predicated. I shall so use the word in this paper.

Nor do I gather up thought about the resurrection of the body. The body is, indeed, an essential part of man, but its future is not contemplated in the subject.

Nor am I required to consider the theories of the *origin* of the soul: whether it had being in a *pre-existing* state; whether it is *propagated* by generation as the body is, or whether each soul is a *distinct creation* by the infinite and eternal Spirit. Apart from the view of the materialist, these three are the leading theories that have been propounded by thinkers relative to the soul's origin. Each theory has its difficulties. But creation, or emanation, which is the generally accepted view of the thinkers, seems to have the smaller and fewer difficulties, though even it leads into the deeps of mystery, before which human reason stands in confusion and bewilderment.

The subject thus narrows itself down to the one question, is the soul's immortality a natural property? That is, as I understand it, immortality an inherent and necessary property of the soul, so that the soul is indestructible. Or are we to conceive of man in his totality, that yesterday came out of nothingness, as sinking into nothingness again, when he has fulfilled his appointed task? You may say there is no such thing as annihilation even of the smallest particle of matter. Granted. Yet the leaf as a leaf is annihilated; the butterfly, behemoth, any organized thing or creature is annihilated as such organism, whatever may become of its constituent elements. May not the race

of man utterly perish as man? "Why can not the Creator, so lavish in His resources, afford to annihilate souls as He annihilates insects?" What reasons have we for believing that even omnipotence can not annihilate a soul? We must surely grant that in the sense of absolute, inherent indestructibleness, He alone hath immortality. Has He—the life and the life-giver—given to the soul inherent immortality? Is there any argument for an affirmative answer? Its advocates might say:

I. There is strong probability in reason for it. On what does this probability rest? From what does it spring? We may come up to it in this way:

(*a*) There is no *proof* to the contrary. This is admitted, for in the nature of things such proof is impossible.

(*b*) The soul is a simple, immaterial entity—an uncompounded spiritual substance—an original spiritual atom that cannot be destroyed.

(*c*) Its characteristics, its qualities.

Take the ordinary threefold classification of the soul: the heart, the mind, the conscience.

Look at the heart. Who can measure the force of *human love?* Love which lives and breathes only for another, which cannot be disenchanted, which even treachery and cruelty cannot altogether alienate, which hesitates at no suffering—no sacrifice, which even death itself cannot wholly quench! Is this mighty force resident only in a thing that in a short time is to perish? Is it like the flame of a candle that goes out in the socket? Nay. See how that love with mighty, majestic power fastens itself upon God Himself—and must it not live as long as He lives?

Take the mind—the intellectual nature—with reason, thought, imagination, judgment. What magnificent achievements! How it conquers earth! How it careers through space into the highest heavens! How it sweeps the past and peers into the future! How it gathers up the treasures of time, and strives to grasp eternity! How it mounts to the very throne of the Eternal in His mystic pavilion, and desires and seeks to know God! How it affiliates with the mind of God! Must it not continue as long as the eternal mind?

Take conscience. This power instinctively knows there is an *eternal right*. It intuitively and involuntarily does homage to that law written in itself. Ever painfully and humiliatingly conscious that it falls so far short of the just and acknowledged demands of the law of righteousness, yet it strives to render to it allegiance and obedience. Nor is this natural homage weakened by any view or any theory we may hold as to the origin, or education of conscience. This acknowledgment of the law and consequent Lawgiver—this sense of failure to meet the requirements —all this is universal. It is the characteristic of the race. It carries itself right to the bar of God, the holy and just One, Himself the Lawgiver. In more than a poetic sense conscience is the voice of God within us and must exist as long as He exists.

Here we have these characteristics of the soul. We look at their operation in human history; and at their very best we find a sad and desperate fragmentariness of human hopes and aspirations and efforts. Is there not probability that the soul with such characteristics has a necessary immortality in which to find its completeness and know and love and serve in perfectness ?

(*d*) The almost utter impossibility of conceiving one's self to cease to be—to become non-existent. It is not difficult to picture to one's self the death of the body. We can readily imagine our body in the state of death. This is due in part, I suppose, to the fact that we are familiar with the sight of a dead body. But we are not familiar with a lifeless soul. If such a thing there is, we know nothing of it. We cannot imagine ourselves as never loving, never knowing, never doing. It seems so abhorrent that we shrink from the effort to form such a conception. One can hardly force upon his consciousness the idea and the fact of his own annihilation.

These, it seems to me, are some of the psychological considerations that serve to give probability to the soul's inherent natural immortality.

I have not presented any metaphysical argument. We might, for example, reason : each soul is a distinct creation by God, or a direct emanation from God—an inbreathing or insufflation of Himself into the new being. He cannot, therefore,

annihilate it. For it is essentially divine—a drop from Himself and must be as indestructible as Himself.

II. It is not in contradiction to the Holy Scriptures.

It is remarkable that the Bible does not define the soul so as to involve necessary indestructibleness. At least I cannot find it.

It is, further, to be remarked that the Bible does not affirm immortality in any abstract or general form. It does not furnish any argument on the subject. It proceeds upon the assumption from Genesis to Revelation that *immortality is man's prerogative.* Take the opposite thought or theory and there is no intelligibleness in the writings of Moses, or David, or Isaiah, or any other of its writers, just as there is no demonstration of the existence of God, but a universal taking it for granted, and you cannot read Genesis any more than Revelation without seeing God in it. Just as a man naturally conceives of God, so he conceives of immortality, and the Scriptures speak in harmony with this natural conception and longing. But when we come to ask for proof-texts that the soul of man is immortal through a natural, inherent, internal necessity, we do not find them. It can only be inferred from such texts that God breathed into the nostrils of man and man became a living soul. "This," says Tayler Lewis, was "that decisive, man-creating, man-constituting act, which made the species; that act that in a moment constituted the first man, and the species *homo*, which, a moment before, was not," and thus the true creation of man was an inspiration. The *primus homo* was the first man thus inspired, and who became the progenitor of the species.

Taking this as a starting point we may marshal all the texts of Scripture that bring "life and immortality to light" and hear them speak inferentially for the natural immortality of the soul.

But for myself, with the little investigation I have been able to give the subject, I cannot find anything in Scripture that positively speaks for this idea.

So far as I have been able to look historically it seems to have been first promulged among some of the fathers of the Greek Church, against which some others protested and argued.

It is easily seen that if the position could be scripturally

established, it would be decisive and final in the conflict with those who contend for the annihilation of the wicked. For if the soul is naturally and inherently indestructible, the annihilationist has no ground on which to stand. The question is, has God given to the spirit of man indestructibility, as a gift? If He has, "the gifts and calling of God are without repentance."

F. W. Robertson forcefully says: "We wish for immortality. The wish is a kind of argument; it is not probable that God would have given all men such a feeling, if He had not meant to gratify it. If we thirst, God has created liquids to gratify thirst. If we thirst for life and love eternal, it is likely that there are an eternal life and an eternal love to satisfy that craving." But that is only an adaptation of the Cartesian inference from the idea to the being of God, although we may be sure that no man will be the victim of an immense delusion; sure that every man will have an immortal existence, whether or not his soul has an inherent, necessary, natural immortality.

VIEWS AND REVIEWS.

PATRICK HENRY'S DEATH.—In an age when it was fashionable to avow sceptical sentiments, Patrick Henry was always ready to defend the Christian faith. A member of the Episcopal Church, according to his latest biographer, Professor Tyler, he not infrequently received the communion. On such occasions his habit was to fast until he had been at the Lord's table, and then to spend the day in retirement.

One hour, at the close of the day, he spent in private prayer and meditation, and during it no one was suffered to intrude upon his privacy. When he was Governor of Virginia he was so alarmed at the spread of infidel sentiments among the young men of the State that he printed, at his own expense, an edition of Soame Jenyn's "View of the Internal Evidence of the Christian Religion," and an edition of "Butler's Analogy." When he met a young man of sceptical tendencies, he would give him one of these books. Doubtless the fact that the book was presented by the Governor of his State secured it attention from the young Virginian, which he might not have paid had it been distributed by a more humble colporteur.

Patrick Henry wrote out an elaborate answer to Paine's "Age of Reason," but being impressed by the replies to Paine then appearing in England, he directed his wife, shortly before his death, to destroy the manuscript, which she did.

In his last will, written by his own hand, he concluded thus: "This is all the inheritance I can give to my dear family. The religion of Christ can give them one which will make them rich indeed."

On the 6th of June, 1799, his kindred being sent for, found him sitting in a large, old-fashioned armchair. He was dying from an incurable internal disease. His physician, Dr. Cabell, was about to administer a preparation of mercury. Taking the vial in his hand, the dying man said, "I suppose, doctor, this is your last resort."

"I am sorry to say, Governor, that it is," replied the doctor. "Acute inflammation of the intestine has already taken place, and unless it is removed, mortification will ensue, if it has not already commenced, which I fear."

"What will be the effect of this medicine, doctor?"

"It will give you immediate relief, or"—the doctor could not finish the sentence.

"You mean, doctor," said the sick man, "that it will give relief, or will prove fatal immediately."

"You can only live a short time without it, and it may relieve you."

"Excuse me, doctor, for a few moments," said Patrick Henry, drawing over his eyes the silk cap he wore. Holding the vial, he prayed aloud for his family, his country, and for his own soul. "Amen!" said he, and swallowed the medicine.

Dr. Cabell, who greatly loved the old patriot, had gone out upon the lawn, where, throwing himself under a tree, he wept bitterly. Mastering himself, he returned to the house and found his patient calmly watching the blood congealing under his finger-nails. The old orator fixed his eyes on Dr. Cabell, with whom he had held many discussions about the Christian religion.

"Doctor," said he with great tenderness, "I wish you to observe how real and beneficial the religion of Christ is to a man about to die."

He then breathed so gently for a few minutes that those around him knew not when he breathed out his spirit.—*Youth's Companion.*

HEINE'S DEATH-BED.—Henri Heine, one of the most sceptical and cynical writers of the age, had passed through terrible torments caused by disease of the spinal marrow. One day as a friend was calling upon him he said: "If I could only walk on crutches, do you know where I would go?"

"No."

"Straight to the church."

"You jest."

"No, no; straight to the church!"

His illness continued, and this is the narrative of another of his friends, who visited him some years later, in 1849:

"I found Heine in Paris, but in what a state! He was lying upon a mattress spread upon the floor. The poor man was almost wholly blind, and his body was a prey of the most poignant anguish; his withered arms stretched lifeless by his side; his disease incurable. His back, burned in spots by the surgeons, was one sore. He seemed the very picture of pain; and yet his fair and noble visage had a strange aspect of peace and submission. He talked of his sufferings as if they were those of another. For a long time I could not understand so much peace and resignation in the midst of such an experience, especially in the case of one who had declared himself an atheist.

"He was not long in giving me the explanation. A smile upon his lips, he described to me yet further the dreadful sufferings he endured, and, after having said that he should never get better, he proceeded in that steady and powerful voice, which still remained despite his utter weakness:

"'My friend, believe me, it is Henri Heine who tells you so, after having reflected on it for years, and after having reconsidered and maturely weighed what has been written on this subject by men of all sorts; believe me, I have reached the conclusion that there is a God who judges our conduct, and that after this life there is another, when the good is rewarded and the wicked punished. Yes, this is what Henri Heine says, who has so often

denied the Holy Ghost. If ever you have doubted these grand truths, fling from you these doubts, and learn by my example that nothing but simple faith in God's mercy can sustain, without repining, atrocious pains. Without that faith, convinced as I am that my bodily state is desperate, I should long since have put an end to my days.'

"Profoundly moved, I seized his hand. He went on: 'There are fools, who, after having passed their lives in scepticism and mistake and denied God in their words and acts, have not courage to own that they are wholly deceived. As for me, I feel compelled to declare that it is a cursed falsehood, which long made me blind. Only, at present I see clearly; and any man who knows me must confess that it is not because my faculties have become weak, for never was my mind more clear and strong than this moment it is.'"—*Frederick Vinton, in Congregationalist, from a French paper.*

PROF. FOWLER, President of the British Association, says that the true scientific attitude to-day is that of a "suspended judgment." What little we know is just sufficient to acquaint us with the fact that there is a boundless field yet to be explored. Prof. Fowler endorses Sir John Lubbock's idea that there may be "fifty other senses as different from ours as sound is from sight; and even within the boundaries of our own senses there may be endless sounds which we cannot hear, and colors as different as red from green of which we have no conception. These and a thousand other questions remain for solution. The familiar world which surrounds us may be a totally different place to other animals. To them it may be full of music which we cannot hear, of color which we cannot see, of sensations which we cannot conceive." Science recognizes the limitations that beset the human powers of knowledge. This consciousness of the vast range of existence lying beyond human cognition should prepare the mind devoutly to receive those assurances of unseen realities and of a Divine Providence that are given to us in revelation.

THE INSTITUTE'S ENDOWMENT.

In No. 3 of the current volume was stated the progress of the movement for the endowment of the Institute. That record was brought to Nov. 18th, 1889.

Since that the following subscriptions have been received:

From members of the Institute: Mr. Franklin Burdge, New York, $100; Rev. Dr. R. Fairbairn, St. Stephen's College, $20; Mr. Edward Sturges, $50; Miss Mary A. Greene, LL.B., Jamaica Plains, Mass., $100; Dr. E. Todd, New York, $50; Prof. Holden, Girard College, $10; Rev. Dr. Yerkes, Danville, Ky., $100; Mr. Marion J. Verdery, $100.

From persons not members: Mr. J. A. Bostwick, $100; Mr. Frederick Billings, $100; Mr. D. O. Mills, $100; Mr. Ernest Goesbeck, $100; Mr. O. H. Keep, $100.

The following questions are addressed most respectfully to the intelligence and conscience of the members of the Institute:

Are there not ten more members of the Institute who will remit their pledge for $100 *each? And twenty who will remit theirs for* $50*? And fifty theirs for* $25 *? And one hundred theirs for* $10*?*

If they will, a Christian layman pledges himself to contribute *five thousand dollars* ($5,000). Will you lose that by withholding your subscription because it is so small?

This record is brought up to January 24th.

MONTHLY MEETINGS.

By the Secretary.

November.—The regular monthly meeting was held in the lecture-room of the Young Men's Christian Association, Twenty-third Street and Fourth Avenue, on Monday evening, Nov. 11th, at 8 o'clock, the President, Rev. Dr. Charles F. Deems, being in the chair. The devotional exercises were led by Rev. Jesse F. Forbes, of New York City. The minutes of the previous meeting were read and approved.

The following names of new members were read by the Secretary:

Rt. Hon. Arthur Fitz-Gerald, Baron Kinnaird, London, England; Isaac L. Long, D.D., President of Arkansas College, Bates-

ville, Ark.; James H. Fair, Esq., San Francisco, Cal. (Endowment Member); Eugene S. Hoffman, D.D., Dean of the General Theological Seminary, New York City; Mrs. Susannah Meredith, Founder and Directress of Prison Missions and the Princess Mary Village Homes, London, England; Thomas Scott Bacon, D.D., Buckeystown, Md.

The President called attention to the circumstance of this being the first meeting of the Institute in the rooms of the Young Men's Christian Association. The regular paper of the evening was by D. B. St. John Roosa, M.D., of New York City, whose subject was "Christian Science." The paper was discussed, and the thanks of the Institute were presented to Dr. Roosa for his interesting and instructive paper, and a copy requested for publication in CHRISTIAN THOUGHT.

DECEMBER, 1889.—The regular monthly meeting was held in the lecture-room of the Young Men's Christian Association in Twenty-third Street, Monday evening, December 9th, 1889, at 8 P.M. The President, Rev. Dr. Charles F. Deems, was in the chair. The devotional exercises were led by Rev. Edward M. Deems of New York. The minutes of the last meeting were read and approved. The Secretary announced the following names of new members:

Mrs. William Ludden, Brooklyn, N. Y.; William T. Findley, D.D., Newark, N. J.; William J. Van Patten, Burlington, Vt.; Prof. Aaron L. Lindsley, D.D., LL.D., Oakland, Cal.; George E. Reed, D.D., LL.D., President Dickinson College, Carlisle, Pa.; Rev. Calvin S. Blackwell, A.M., Augusta, Ga.

The regular paper of the evening was by Prof. Wm. W. Olssen of St. Stephen's College, Annandale, N. Y., whose subject was, "The Limited Area of Christianity." On motion by Mr. Wm. Harman Brown, seconded by Rev. E. M. Deems, it was

Resolved, That the thanks of the Institute are hereby presented to Prof. Olssen, for his admirable paper, and that a copy be requested for publication in CHRISTIAN THOUGHT.

JANUARY, 1890.—The regular meeting of the Institute was held in the lecture-room of the Young Men's Christian Association, Twenty-third Street, New York, Monday evening, January 6th, 1890, at 8 P.M. In the absence of the President, on account of illness, Prof. Dr. M. J. Cramer of East Orange, N. J., was called to the chair. The devotional exercises were conducted by Stephen L. Baldwin, D.D., of New York.

The regular paper of the evening was by Rev. George C. Yeisley of Hudson, N. Y., whose subject was "The Uses of the Imagination in Historical Science." The paper and subject were

discussed by Mr. W. M. Boucher, Mr. Stephen H. Wilder, Dr. Stephen L. Baldwin and Dr. Cramer.

On motion by Dr. Baldwin, seconded by Rev. J. F. Forbes, it was

Resolved, That we present the thanks of the Institute to Rev. George C. Yeisley for his interesting essay, and that a copy be requested for publication in CHRISTIAN THOUGHT.

BOOKS RECEIVED.

From Messrs. Ginn & Co., Boston, we have the following:

"LIBRARY OF ANGLO-SAXON POETRY." Vol. III. (Yulwulf's "Elene.") An old English poem, edited with introduction, Latin original, notes, and complete glossary, by Charles W. Kent, Professor in the University of Tennessee.

"THE IRREGULAR VERBS OF ATTIC PROSE," their forms, prominent meanings, and important compounds, together with lists of related words and English derivatives, by Addison Hogue, Professor of Greek in the University of Mississippi.

"IPHIGENIA AMONG THE TAURIANS," edited by Isaac Flagg, is the title of one of the volumes in the College Series of Greek Authors, edited under the supervision of John Williams White and Thomas D. Seymour. This is altogether the best edition known to us of the masterpiece of Euripides.

"THE PRACTICAL ELEMENTS OF RHETORIC," by John F. Genung, Ph.D. (Leipsic), Professor of Rhetoric in Amherst College. 12mo., cloth, 488 pp.

"SCHOOL ILIAD," Books I.–III., and Vocabulary. By Thomas D. Seymour, Professor of Greek in Yale College. 8vo, cloth, 138 pp., text; 105 pp., vocabulary.

"THE BEGINNER'S BOOK IN GERMAN," with humorous illustrations. By Sophie Doriot. 8vo, boards, 273 pp.

"MÉMOIRES DE SAINT-SIMON." Edited and annotated by Professor A. N. VAN DAELL. 8vo, cloth, 236 pp.

"THE TWO GREAT RETREATS OF HISTORY." (The Retreat of the Ten Thousand Greeks, by Grote, and Napoleon's Retreat from Moscow, by Count Ségur.) 8vo, 318 pp. Price, 60 cents.

"THE EASTERN NATIONS AND GREECE," by P. V. N. Myers, President of Belmont College, Ohio. 12mo., cloth, 369 pp., with illustrations and maps. Mailing price, $1.10.

"GENERAL HISTORY," for colleges and high-schools, by P. V. N. Myers, A.M. 8vo, cloth, 759 pp., illustrations and maps. Price, $1.65.

"A FOURTH READER," by J. H. Stickney. 8vo, boards, 362 pp. Price, 60 cts.

"A READER IN BOTANY," by Jane H. Newell. Cloth, 8vo, 209 pp. Price, 70c.

"COMMON-SCHOOL SONG READER," by W. S. Tilden, of the State Normal School, Framingham, Mass. 8vo, boards, 176 pp. Price, 45 cents.

"PRIMARY ARITHMETIC," by G. A. Wentworth, A.M., and E. M. Reed. 8vo, boards, 220 pp. Price, 35 cents.

"PRACTICAL LATIN COMPOSITION," by W. C. Collar, A.M. 8vo, cloth, 268 pp. Price, $1.10.

"PASTOR'S HAND-BOOK," by W. W. Everts. Revised edition. 16mo., 115 pp. Cloth, 75 cents; flexible leather, $1. Buckbee & Co.

"THE HUMAN MORAL PROBLEM," by R. R. Conn. 12mo., cloth, 69 pp. New York: A. C. Armstrong & Son.

CHRISTIAN THOUGHT.

THE USE OF RETALIATION IN THE MOSAIC LAW.

[Delivered before the American Institute of Christian Philosophy, July 25th, 1889.]

BY AUSTIN ABBOTT, ESQ., NEW YORK.

IN responding to the request of your honored president that I should address you on the subject of the Mosaic Law of Retaliation, I desire to say that the views I am about to express are derived from reading the Old Testament Scriptures, as a student of jurisprudence, to inform myself of the character and scope of the legislative and judicial systems there described, for the light they would throw upon the ethics of the law of our time. In this attempt at a systematic study of the Pentateuch, with no predetermined conclusions to support, I had not proceeded far before I found a new and fascinating interest in the religious source and the religious bearing of the Mosaic law.

Condemnations of that law as barbarous and cruel have been lately coming to our attention from widely different quarters. The confession of faith of the sincere and ascetic Tolstoi, the sarcasms of the jocose and profitable Ingersoll, and the vivid canvases of the pictorial Verestchagin, all have given new emphasis in the popular mind to the rule, an eye for an eye and a tooth for a tooth, as if it were the symbol of a general spirit of cruelty in the Old Testament law.

The serious and intelligent part of this criticism of the Mosaic law is best presented, at least for the purposes of this discussion, by Count Tolstoi's interpretation of the contrasted precepts of Christ contained in the Sermon on the Mount.

Let us follow his method, and approach the question of retaliation in the Mosaic code, through Christ's instructions on the

same subject, examining His precepts upon non-resistance as interpreted by His life and conduct, and then trace the origin and function of force, in the older law.

In reading Christ's precepts, let us inquire for their meaning in the same manner in which we inquire for the meaning of any other law. I assume that His purpose was to give not a mere hyperbolic expression of sentiment, not an idealization of an indefinite and as yet impracticable future, not an exaggerated pictorial statement of an utopian theory, but a rule of conduct. Let us endeavor, by a judicial reading of His words, to ascertain what the rule is, and for what conduct it is to be the rule.

I. The precepts of Jesus Christ on this subject are chiefly contained in that part of the Sermon on the Mount in which He contrasts these precepts with the provisions of the Mosaic law. He says, Matt. v., 38, 39, "Ye have heard that it hath been said, an eye for an eye, and a tooth for a tooth: But I say unto you that ye resist not evil; but whosoever shall smite thee on the right cheek, turn him the other also," etc. This was said to His disciples, or if to "the multitude," it was to the multitude of poor, hungry, and depressed, from among whom He sought to draw disciples. Here, as in all other parts of this sermon, He appears to be speaking to them as individuals.

Now those who attempt to explain away these words as not to be taken literally, forget that they embody just the instructions we should give under similar circumstances at the present day, and that in giving them we should expect our words to be taken literally. If we were about to send a delegation to the worst haunts of the city, or into the most hostile country of heathen, we should, if we gave them any instructions on the subject, tell them not to allow themselves to be drawn into any personal contentions whatever. We should say: If you are attacked do not retaliate. If missiles are thrown do not throw any in return. Resist not evil. When you begin to do that, your usefulness as missionaries is at an end. The same would be the spirit of our instructions if they were going as individuals to live among enemies, and endeavor by a manifestation of Christian life, to win the attention and affection and change the faith of those about them.

It is a sound principle for the interpretation of any precept to ask to whom was it addressed and under what circumstances. If we consider this precept in such light, how can we avoid understanding it as a simple unexaggerated direction intended to be understood literally, and obeyed literally, as far as practicable by those who heard it?

But it may be objected, Upon what principle can we limit it to those who heard it? Observe, I have not yet said that we can so limit it. For its limitations we must inquire further. The point we have now reached that we do not get rid of the question of non-resistance, by proposing to consider this precept as Oriental exaggeration of language; because we should use equivalent language in a literal sense in now endeavoring, under like circumstances, to carry on Christ's purpose as we understand it.

The Hierarchical Church for many centuries undertook to advance religion by force, but failed. The Protestant churches at least have learned that the acceptance of this precept in its literal sense, as an actual rule of conduct, is essential to the missionary. What is it that enables Miss Collins and Miss Goodale and others to go freely, and alone if need be, among the most savage and brutal of the Indian tribes at the West, in teaching and in succoring the sick? It is the fact that they accept this precept in its literal sense. Any one of those missionaries will tell you that it would be absolutely fatal to success, to carry a pistol, or engage in a "scrapping match" with a hostile squaw.

Is there then no limitation? Is Count Tolstoi right? Let us look a little further. The context itself warns us to look for some limitation. Christ prefaced this part of His instructions, by cautioning His hearers not to misunderstand what He was about to say. "Think not," said He, before He proceeded to speak of the Mosaic law that sanctioned force, "Think not that I am come to destroy the law, or the prophets. I am not come to destroy but to fulfil!" And to emphasize this warning still more, He adds, "For verily I say unto you, till Heaven and earth pass, one jot or one tittle shall in no wise pass from the law, till all be fulfilled." (Matt. v., 17.)

The solicitude thus expressed lest He should be misunderstood in the criticisms on the Mosaic law, which follow, re-

quire us to look candidly in the expectation of finding some limitation on His precepts of non-resistance.

To understand Him fairly, we must take the trouble to look at other parts of His teaching and at His example. We cannot doubt that both will, as a whole, be found consistent. If any inconsistency appears, it must be not in the teacher, but in our misunderstanding of His teachings.

Let us then inquire what was the attitude of Christ to the government under which He lived. Did He, like Count Tolstoi, say that its use of force was wrong? On the contrary, He said "Render unto Cæsar the things which are Cæsar's" (Matt. xxii., 17), and He said this in answer to the question whether the Jews owed Cæsar's government a duty of support. Some have thought it not unworthy of Him to suggest that this answer was an equivocation, intended to avoid responsibility. But this supposition is fully contradicted by the fact that, when called on by the tax-gatherers, He Himself contributed to maintain the government of Cæsar, directing Peter to get money for the purpose from a fish's mouth (Matt. xvii., 24, 27). Matthew who records these incidents, was himself a tax-gatherer; and understood completely the significance of the words of Christ as unequivocal answers to the claim of the Jews that it was unlawful to contribute to the support of a government of force. He wrote his Gospel, it is supposed, especially for Jewish readers, and he alone of all the Evangelists, mentions both these testimonies of Christ to their duty to render material assistance even to so irreligious and cruel a government as that of their Roman conquerors.

It should be noticed that the other Apostles, so far as we have any indication, understood His teachings in the same sense. Paul says that the powers that be are ordained of God. Peter adds, that we are to be subject to every ordinance of man for the Lord's sake, that governors are sent for vengeance on evil doers, and that we are not only to fear God but also to honor the king. He could not have said this if he understood that Christ forbade kingly power and judicial retribution.

Moreover, Christ Himself used force in expelling intruders from the temple. The manner in which He did this intimated if it did not expressly say that He was doing what the priests and

Levites ought to have done. It was not only an expulsion for the money-changers, but a rebuke for the Pharisees. We cannot understand it otherwise than as a part of His human example, a sanction for the use of force by men in such circumstances.

We see, then, that Christ used force; that He contributed to support a government of force, and directed His disciples to do so; and that, when about to inculcate non-resistance, He warned His hearers that He came not to destroy but to fulfil the Mosaic law of force, which He was about to contrast with precepts of His own.

With this survey of His example and His teachings together, as a whole, in view, let us return to the question, What did He mean when He said, "Ye have heard that it hath been said, an eye for an eye and a tooth for a tooth; but I say unto you, resist not evil"?

The key to His meaning may be found in what He said on another occasion concerning the law of divorce. In this same Sermon on the Mount, He criticised in like manner the Mosaic sanction for divorce; and on the other occasion I refer to, when asked about that law of divorce, He said: "For the hardness of your heart Moses wrote you this precept" (Mark x., 5). In other words: Moses' law was an external rule of conduct framed in such a way as to be measurably enforcible by penal sanctions against a reluctant people. Christ's precept is an interior principle of life such that, if voluntarily adopted by all mankind, no penal sanctions to enforce external rules would be needed. And He said in effect that the law of force was to continue—He did not come to destroy it,—it was to continue in every detail, except only as by the adoption of His precepts its objects should be fulfilled. Not one jot or tittle should pass away until all be fulfilled.

II. Let us now trace the origin and function of force in the Mosaic law to which Christ adverted. In this inquiry, as in the previous one, let us examine it as we should any other system of law, enquiring first to whom the law was addressed, and what their condition; what its object; what the means of enforcement.

The Hebrews were a pastoral and nomadic people, of general

peaceful habits, and held together by strong ties of tribe and race. They lived under the patriarchal organization in large families, but for a long period had been practically bondmen (Ex. i.).

In patriarchal times the family was an organization unlike anything that we have. It has been not inaptly described in modern phrase as a quasi-corporation. The father was the head or ruler of the household. It is said that he had the power of life and death over its members; but this is rather the statement of a fact than of a rule of law. If he put a member of the household to death there was no superior power to call him to account. His power over property was more definitely restricted. The property belonged rather to the family than to him. For the care and the accumulation of the flocks and herds of which their wealth chiefly consisted he was largely dependent on the assistance of his sons, and they maintained to some degree a right of veto on his power of alienation. This family government was the only settled government the Hebrews possessed when they had thrown off the Egyptian yoke. They followed Moses as a leader who promised them liberty, but they did not make him their king. The genius of his legislation consisted in its divine adaptation to secure its voluntary acceptance by such a people, and in the consequent practicableness of its enforcement by themselves under his direction.

His first step was to organize the administration of justice. Controversies abounded among the members of families, grouped in their various tribes, and crowding each other in caravan and camp. These controversies took all his time from morning till night, until at the wise suggestion of Jethro he organized inferior courts by appointing a magistrate or arbitrator for each ten men, each fifty, each hundred, and each thousand.

The nature of the controversies he had chiefly to deal with is clearly depicted in the precepts which by Divine direction he gave them. They come next after the Ten Commandments, in the Scripture narrative, beginning with the 21st chapter of Exodus. It is obvious that prominent among the complaints brought before him must have been homicide, kidnapping, mutiny against parental authority, assault and battery, and wound-

ing or maiming, negligence in care of dangerous animals, theft, burglary, trespass, etc. Other provisions of the Mosaic law show that he had to punish blasphemy and idolatry (which were necessarily treason), sodomy, or the crime against nature, the eating of carrion and of animals not fit for food, the sacrifice of children, perjury by witnesses, and corruption in judges.

Our limits now confine us to the crimes of violence which we will take as typical of all.

Up to this time the Hebrews had no other law than that of retaliation. Private vengeance, so far as not interfered with by their Egyptian task-masters, was their mode of redress for wrongs which the head of the family to which the wrongdoer belonged did not redress.

Revenge, says Lord Bacon, is a kind of wild justice.

Moses himself understood this. In his earlier life he had seen an Egyptian smiting a Hebrew. He looked this way and that, and when he saw that there was no man, he smote the Egyptian and hid him in the sand (Ex. ii., 12).

It is the nature of revenge to make the punishment worse than the offence. An insult is not avenged by a counter-insult; a blow is not avenged by an equal blow. In the wild law of revenge an insult calls for a blow. A blow is avenged by knocking down. Knocking down is avenged by killing. The killing of one man is avenged by killing his family. This is the way of retaliation the world over and through all history. What is more natural than this? We see it in the boys in the street, in the roughs about us, in the Indians at the West, we see it wherever life is unregulated by law. As to its prevalence among the Hebrews we need only mention a few familiar incidents. Moses did not merely smite the Egyptian whom he saw smiting a Hebrew. He killed the Egyptian. Samson's Philistine father-in-law gave Samson's wife to another man. To punish him Samson burned the corn and vineyards of the Philistine people. The Philistine people, to punish Samson for burning their corn and vineyards, burned his wife and her father to death. Samson, to punish the Philistine people for this homicide, smote them hip and thigh with a great slaughter. And when he was afterward captured by Philistines, and they had put out his eyes, and were

bantering him at a feast in the temple of Dagon, he said to himself: Let me be avenged of the Philistines for my two eyes; let me die with the Philistines. And the dead that he slew at his death were more than they which he slew in his life (Jud. xviii., 28–30). Revenge thus always proceeds from a less mischief to a greater. This characteristic of the *lex talionis* was carried out systematically through the early patriarchal family and tribal relation. And there is ample evidence that cruel mutilations of the most barbarous kind were practised among the Hebrews. Moses' limit of retaliation was plainly meant to stop these barbarities.

Sir Henry Maine describes the community which Moses had to govern as follows:

"The chief lineaments of such a society, as collected from the early chapters of Genesis, I need not attempt to depict with any minuteness. . . . The points which lie on the surface of the history are these: The eldest male parent—the eldest ascendant—is absolutely supreme in his household. His dominion extends to life and death, and is as unqualified over his children and their houses as over his slaves; indeed the relations of sonship and serfdom appear to differ in little beyond the higher capacity which the child in blood possesses of becoming one day the head of a family himself. The flocks and herds of the children are the flocks and herds of the father, and the possessions of the parent, which he holds in a representative rather than in a proprietary character, are equally divided at his death among his descendants in the first degree, the eldest son sometimes receiving a double share under the name of birthright, but more generally endowed with no hereditary advantage beyond an honorary precedence. A less obvious inference from the scriptural accounts is that they seem to plant us on the traces of the breach which is first effected in the empire of the parent. The families of Jacob and Esau separate and form two nations; but the families of Jacob's children hold together and become a people. This looks like the immature germ of a state or commonwealth, and of an order of rights superior to the claims of family relation. . . . Men are first seen distributed in perfectly insulated groups, held together by obedience to the parent. Law is

the parent's word, but it is not yet in the condition of those themistes which were analyzed in the first chapter of this work. When we go forward to the state of society in which these early legal conceptions show themselves as formed, we find that they still partake of the mystery and spontaneity which must have seemed to characterize a despotic father's commands, but that at the same time, inasmuch as they proceed from a sovereign, they presuppose a union of family groups in some wider organization. The next question is, What is the nature of this union and the degree of intimacy which it involves? It is just here that archaic law renders us one of the greatest of its services and fills up a gap which otherwise could only have been bridged by conjecture. It is full, in all its provinces, of the clearest indications that society in primitive times was not what it is assumed to be at present—a collection of individuals. In fact, and in the view of the men who composed it, it was an aggregation of families. The contrast may be most forcibly expressed by saying that the *unit* of an ancient society was the Family, of a modern society the Individual. We must be prepared to find in ancient law all the consequences of this difference. It is so framed as to be adjusted to a system of small independent corporations. It is therefore scanty, because it is supplemented by the despotic commands of the heads of households. It is ceremonious, because the transactions to which it pays regard resemble international concerns much more than the quick play of intercourse between individuals. Above all it has a peculiarity of which the full importance cannot be shown at present. It takes a view of *life* wholly unlike any which appears in developed jurisprudence. Corporations *never die*, and accordingly primitive law considers the entities with which it deals, *i.e.*, the patriarchal or family groups, as perpetual and inextinguishable. This view is closely allied to the peculiar aspect under which, in very ancient times, moral attributes present themselves. The moral elevation and moral debasement of the individual appear to be confounded with, or postponed to, the merits and offences of the group to which the individual belongs. If the community sins, its guilt is much more than the sum of the offences committed by its members; the crime is a corporate act, and extends in its conse-

quences to many more persons than have shared in its actual perpetration. If, on the other hand, the individual is conspicuously guilty, it is his children, his kinsfolk, his tribesmen, or his fellow-citizens, who suffer with him, and sometimes for him."

Such were the forces at work in the society which Moses had to govern.

What were his means of government? He had no standing army. The military power of his people consisted in their voluntary service as a militia, and the only motives which he could rely on were their religious disposition to obey the divine commands given through him, and their self-interest enlisted in the desire to reach the promised land.

He had no patronage: the national tax even, after it was established, went to the priests and Levites.

He had no prison: the community he governed was wandering, moving from place to place, encamping in tents, or temporary huts. We read of prisons in Egypt in the previous history of the children of Israel. We read in later history of the prison house in Philistia, and of prisons in Palestine after the time of Solomon, but in the nomadic period while Moses ruled we read of none—there could have been none. We have two instances recorded of accused persons being seized and "kept in ward" until they could be tried (Lev. xxiv., 12.; Num. xv., 34); and such temporary confinement was the nearest approach to imprisonment that was practicable in the administration of justice. Permanent bodily restraint of a criminal by way of punishment could only be had by committing him to servitude under the hand of the head of some family, who would have lawful power to chastise him and to bind him, and practically some power of life and death over him.

To govern sufficiently this nomadic population, who were reverent and conscientious, but also rude, ignorant, slave-holding and polygamous, what could be more admirably adapted than the system of Mosaic law? The only available punishments besides retaliation in kind were, death, sale into servitude, fines and forfeitures. Death was affixed as the punishment for blasphemy and idolatry, and in these cases we may suppose was usually inflicted by the sanction of priests and Levites, the witnesses lead-

ing and the people joining in stoning the accused to death. Death was also the punishment for revolt against parental authority, and for kidnapping and murder; and this probably practically meant that if the head of the family killed a rebellious son, or the kindred of the murdered or kidnapped man killed the criminal in pursuing him, the law was satisfied and they were justified. Sale into bondage, that is to say, penal servitude, though without prisons, was the punishment for burglary if the offender could not make restitution. This servitude was tempered with an ingenious and humane qualification. It expired by its own limitation in six years. After the offender had served his time in the retinue of his master, if he wished to continue in the same home as a servant, his master could accept him, boring his ear as a token of permanent allegiance. Thus the master whose treatment of a criminal he had bought was such as to win the confidence and affection of the man, might secure thereby his voluntary services for life; and the thief who, in serving out his term, won the good opinion of his master might secure thereby a home and support for life.

It would be interesting to pursue the subjects of fines and forfeitures; but our limits forbid. It must suffice to notice the provision for the minor crimes of violence, for which death or bondage was inappropriate. For these Moses said, an eye for an eye, and a tooth for a tooth. It must no longer be a blow for a word, and mutilation in return for a blow. The punishment must be limited by the offence. It was not a sanction on cruelty; it was a restraint on cruelty, and a restraint which at once suggested most powerfully the idea of justice. So far as we can learn, Moses not only allowed the injured persons to inflict the punishment, but it seems he relied on them to do so. These commands were given, not to a body of judges or police, but to the children of Israel at large. And he added, "thine eye shall not pity." In other words, there shall be no favoritism nor weak laxity in this administration of penal justice by the people. It is to be no longer the wild justice of revenge, but an equal punishment, measured by the offence, hand for hand, foot for foot, burning for burning, wound for wound,—and neither indulged in passion and hot blood, nor omitted at pleasure, but

administered as a duty, promptly, openly, and by countenance and, if need be, with the aid of the people. What could be more perfectly adapted to subdue the passions of men into the service of the commonwealth, and engender in the uncultured minds of these freedmen from Egypt, the rudiments of a sense of justice in law? (Law in Ex. xxi., xxii.; Lev. xxiv., 14-22.; Deut. xix.)

Asaph, the poet and prophet of David's time, more than four hundred years afterward, in describing the theocratic government which was organized through Moses, explained the genius of the Mosaic legislation in a single significant phrase: "Surely the wrath of man shall praise Thee; the remainder of wrath shalt Thou restrain" (Ps. lxxvi., 10). In other words, the passions of men are made to serve God's justice, and the excess of passion beyond justice is to be suppressed.

Nor is it to be overlooked that the punishments of our own day administered by this Christian people are often more severe in proportion to the offence than Moses' law would have allowed.*

The principles which seem to characterize the Mosaic legislation are:

1. To maintain the authority of the government by adopting for mutiny, that is to say for idolatry and blasphemy, the punishment of death, just as within each family the father might, by immemorial usage, administer the same punishment against a mutinous son.

2. To mitigate oppression by requiring restitutions with mathematical precision, and putting limited terms of service in place of unlimited servitude.

3. To use the common indignation and retaliation aroused by crimes of violence, as the means of effecting immediate but limited punishment, and thus to awaken in place of revenge a sense of equal justice and public protection.

It is interesting to observe that harsh as these punishments may seem, they were in point of justice and humanity so far in

* In the criminal courts in the city of New York, between Jan. 1st, 1888, and Oct. 31st, 1889, the punishment for assault, in twelve cases, was not less than six years in State Prison. There were twelve such cases, and the aggregate of their terms was 97 years and 10 months, an average of over eight years each. Under Moses' law each of these offenders would have been whipped by the witnesses in the same measure of suffering that he had inflicted, and been sent immediately home to his family.

advance of the common disposition of the people, that the history of the Jews for many years after Moses' death is in large part the history of the violation and disregard of these laws.*

Christ commended the law of force when He warned His disciples not to imagine that He came to destroy it. Nevertheless, He gave them the principle which, if adopted by all mankind, will supersede that force; and which meanwhile must be adopted by His disciples as the rule of individual conduct, if they would follow His example and directly advance His cause; while still they support the government of force, as necessary so long as lawless force continues, and as not intended by Him to be destroyed until its object, viz., peace on earth, shall be fulfilled.

* The speaker here, to illustrate the enlistment of natural impulses in the service of justice, and the restraint thereby of lawless violence, narrated a simple street incident where he was appealed to by school-boys to settle a contention for possession of a whip. The fists were doubled up for a fight and the ring was formed when the claimant appealed to him. He saw how easily good advice might be thrown away, so after making the combatants promise to abide by his decision as judge, he told the boys he wanted a sheriff, and that the duty of a sheriff was to compel obedience to the judge's decision. A stout, good-natured looking boy was chosen for the purpose, and was told that he was chosen not to do any thing cruel or ugly, but to *compel* them to obey. He doubled up his fists with quite as much spirit as the combatants had showed, and said he was ready. After the requisite force had thus been enlisted, the stories on both sides were heard, and the decision plainly resulting was given. The possessor looked at the judge and shook his head, then he looked at the sheriff and gave up the whip, amid a general murmur of satisfaction among the surrounding crowd.

MEN OF LITERARY GENIUS AND CHRISTIANITY.

[A lecture delivered before the American Institute of Christian Philosophy, July 25th, 1889.

By Jeremiah Eames Rankin, D.D., LL.D.,
President of Howard University, Washington, D. C.

ARTHUR SCHOPENHAUER, the pessimist, has said: "Religions are necessary to the people, and an inestimable benefit to them. Just in proportion as they hinder the progress of humanity in the knowledge of the truth, they must be disposed of, but with all possible wisdom. But to exact of a great genius, a Goethe, a Shakespeare, that he implicitly accept, in good faith and exact sense, the dogmas of any religion, is to compel a giant to put on the shoes of a dwarf." The idea of this writer seems to be that, to keep humanity together with any degree of safety, while men of great intellectual gifts study out what is the truth, and make its proper demarcations, the common people need the conservative and cohesive power of religion. But like the scaffolding around a magnificent marble temple, when the structure is fairly up, then religions are to be dispensed with as quick as may be; nay, if possible, are to be clandestinely disposed of, during the process of erection. If dispensed with prematurely before the structure is complete, there might be danger to the philosophers, to their temple, to the whole human family of the generation witnessing the process; indeed, to the whole human fabric. Dr. Munger sets it down against Christianity, as up to his time formulated, that it has been rejected by Hume, Burns, Carlyle and McDonald.

This statement of Schopenhauer, as well as the stricture of Dr. Munger, contains several fallacies. In the first place, it is implied that the religious wants of humanity are not one and the same in every grade of life and society; that Goethe and Shakespeare, walking the serene heights of their sublime thoughts

having a wider æsthetic and mental horizon than the vast multitudes of the human family; having larger instincts and quicker intuitions, are exceptional in their relations to God and the things of God; that they are not like-conditioned; not made of the same stuff with the humbler ranks of the human family; that like the Pharisee in the parable, they need no usher to present them to God's sacred things; they can press their unobstructed way to the very altar of the temple, thanking God that they are not as other men; while the great mass of mankind, the great common people, must stand afar off, and smite upon their breasts, crying, "Unclean; God be merciful to us sinners"; waiting there in the outer courts until the incubation of the truth, the evolution of the religion of the future, by their intellectual superiors; until the men whom, because of their exceptional endowments humanity has agreed to regard as demi-gods, shall teach them what they must do to be saved; or, show how they need to do nothing, not being lost.

Men of genius are what they are, only because they are more human, unite in themselves more human characteristics, touch human nature at more common points, than the rest of mankind. Emerson says, "The young man reveres men of genius, because, to speak truly, they are more himself than he is." The works of such men are less individual than typical and universal. In their creations—their stories, plays, poems, —they give us touches of our common nature which prove the whole world to be kin. They give us the key which unlocks the life of humanity, because God has given it to them. Faust is a kind of microcosm; just as Goethe himself was; full-lived, many-sided, cut like a diamond to get the largest possible number of facets; reflecting all lights, from things in earth, sea, and air; from things in hell or Heaven; red, lurid and blasting, or glowing with the pure light of God. Shakespeare expressly defines his dramatic art to be that of holding the mirror up to Nature; and so, if a man's imaginations are foul as Vulcan's stithy, he portrays them to the life; and we have Lady Macbeth, and Tarquin the Proud, as well as Cordelia and Hamlet; but neither one of them more our common humanity than all the rest. This chameleon-like function of taking color from what is next them

in humanity; this power to eat the leaf humanity, and convert it into silk, in which they wind themselves in some cocoon of a work and die to earth, that they may live forever, is characteristic of men of genius, and determines them as such.

Few men of genius have professed to hold themselves strictly accountable to God's moral standards. Are they not creators too? The poet Burns was already the husband of Jean Armour in her eyes, and in the eyes of God, when he spent those days of delight, making love to his Highland Mary, which he has immortalized in his verse. With so little sense of the moral fitness of things did he move among his surroundings. Shall Robert Burns give man his religious faith? And the florid, unblushing animalism of the great painter Rubens, with but a single exception, his "Madonna at the Cross," marks the products of his art, in the very holiest of his pictures, even under the very shadows of God's highest mysteries. Indeed, all the earlier artists have seemed to delight in seizing every opportunity of putting upon canvas scenes from ancient mythology, in which could be made to figure physical forms of beauty where might revel their imagination and their art, whatever the moral effect of the delineation. If you could ask even the well-balanced Shakespeare why he selected "Venus and Adonis," or "The Rape of Lucrece," as the subjects of his productions, he would probably answer that they were suited to furnish him such opportunities of describing physical beauty as would display his poetic genius. Though this was his earlier work. And this, doubtless, is why Rubens chose many of his subjects. For example, no one can analyze such a painting as his "Judgment of Paris" without the conclusion that this subject was selected with reference to the display of the physical beauties of the female form as Rubens knew how to delineate them. And those well acquainted with the triumphs of his pencil will tell you which of his several wives was the original of each; so that many of his greatest works constitute quite as much a family picture-gallery as anything else.

"Faust" is supposed to be Goethe's masterpiece. If you ask the author why he wrote this play, this is his answer: "As if I knew myself, or could tell you. It was not in my line as a poet to embody anything that was abstract, that is, to

write with an ethical object"! What did he regard in his line as a poet? Simply to reproduce in his verse impressions physical, moral, spiritual, made upon his own soul by life as he had seen it and lived it: by its temptations, labors, mysteries, joys, sorrows, remorses, as he had witnessed them and encountered them. It has been the great unsolved problem of literature: What did Goethe mean by "Faust"? Almost every student of Goethe has a new theory. Goethe himself had no theory at all. If Goethe did not know, how can anybody else know? He goes on: "That man, continually struggling from degrading error towards something better, should be redeemed, is an effective, and to many a good and elevating thought; but it is no idea which lies at the foundation of the whole and of every individual scene of 'Faust.' It would have been a fine thing, indeed, if I had strung so rich, varied, and highly diversified a life, as I have brought to view in 'Faust,' upon the slender string of one pervading idea. The puppet-fable of 'Faust' murmured with many voices in my soul. I, too, had wandered into every department of knowledge, and had returned early enough, satisfied with the vanity of science. And life, too, I had tried under various aspects, and always came back sorrowing and unsatisfied." "Faust" is only Goethe himself in all scenes, real and imaginable. This great German writer here repudiates allegiance not only to any single standard of excellence, but especially to any high moral standard, such as the redemption of his hero from evil. This is not his conception of a poet's function. He defines genius to be "that power of man which, by its deeds and actions, gives laws and rules." "Every highly gifted man," he says, "is called upon to diffuse whatever there is that is divine in him." And he means not whatever is Godlike, but whatever is creative. "In attempting this," he adds, "he comes in contact with the rough world, and, in order to act upon it, he must put himself upon the same level. Thus, in a great measure, he compromises his high advantages, and finally forfeits them altogether. The heavenly, the eternal, is buried in a body of earthly designs, and hurried with it to the fate of the transient." Again he says: "The greatest men are connected with their own century through some weakness." And, it is implied

above, needfully; else there would be no connection between themselves and their century.

Thomas Carlyle, who was always a very intemperate admirer of the great German, whom he did so much to introduce into English literature, and to interpret to English-speaking people, says of "Wilhelm Meister's Travels," that it is "one of the most beautiful books Goethe ever wrote; full of meek wisdom, of intellect and piety, strangely illuminative, and very touching to those who have eyes to discern and hearts to feel it." He doubtless intended to limit himself to the Travels. For he himself says of the Apprenticeship: "In many points, both literary and moral, I may have wished devoutly that he had not written as he has done. The literary and moral persuasions of a man like Goethe are objects of a rational curiosity. Accordingly, except a few phrases and sentences, amounting not in all to a page, which I have dropped as evidently unfit for the English taste, I have studied to present the work exactly as it is in German." Any man who reads "Wilhelm Meister's Apprenticeship," and then reads "Tom Brown's School Days at Rugby," or "Tom Brown at Oxford," or even Thackeray's "Pendennis"—books which take a young man over about the same period in life—will discern at once what Carlyle means by English taste. He means English regard for purity in thought, speech, and life. "Wilhelm Meister's Apprenticeship," with all its wise philosophy respecting life, with its wonderful criticisms on Shakespeare, with its sad but fascinating pictures of Mignon—that beautiful waif, weeping between the two eternities, has been produced under no law; least of all, any moral law! This its author admits. Hamlet may be studied as a work of art, wrought out in accordance with certain great principles of art; but, if we may believe Goethe himself, who made them, neither "Wilhelm Meister" nor "Faust." As that drama, so this story is a book recording impressions—impressions made by a many-sided human life upon the many-sided creature Goethe, who seems to have thought himself privileged to try life in all its vicissitude of good, bad, and indifferent, that he might have the power of recording what he thinks of it and how it impresses him. And Friedrich, one of the characters in "Wilhelm Meister," seems to have hit the case

pretty accurately when he says to Wilhelm at the close of the book: "Thou resemblest Saul, the son of Kish, who went out to seek his father's asses and found a kingdom." As though this hero's life had been one consecutive series of blunders which chance had prevented from being fatal.

The second fallacy of Schopenhauer, and those who agree with him, in his claim that high creative genius should be exempted from belief in religious dogmas, is the implication that there can be any truest work of genius without the practical and working recognition of the very fundamental things in religion which, it is claimed, that great geniuses like Goethe and Shakespeare will inevitably repudiate as unsatisfactory to themselves. The fundamental things in religion are God the Creator and Judge, man the creature, sin, the conscience, punishment, redemption. There is no literature worthy of the name which does not directly or indirectly imply all these things. If these things are absent, there is no place for creative genius, no material for it to work with. It is life without an atmosphere. Just as a painter needs a sky, a horizon, clouds, trees, the presence and works of man, for a picture, so a great literary artist needs all these elements for his work. Take even the drama of the ancients, imperfect as were their conceptions of God and His moral economy, as we understand them, they had all these elements, or their equivalent. This is true of the "Prometheus" of Aeschylus. Here is a drama in which there is an elevation of thought, a sustained and severe dignity like that of Isaiah or Milton, and coming from the same great themes: an avenging God, a penalty never exhausting itself because of a constant renewal of the power to suffer, and the hope of deliverance only through the interposition of Heaven, as though were foreshadowed the Incarnation; God made flesh! As Mercury says to Prometheus:

> "Expect no pause, no respite, till some god
> Comes to relieve thy pains; willing to pass
> The dreary realms of ever-during night;
> The dark descent of Tartarus profound."

It is God, as He is in nature, art, and life, who gives genius the necessary conditions of its work. The true artist cannot free himself from God as thus immanent. There is nothing more

stimulating than to study the works of Shakespeare with reference to this very fact, to find there the environment of the living God. It is not possible to conceive of such creations as Macbeth, Hamlet, King Lear, Othello, Julius Caesar, without implying all the great doctrines of the Bible. Whatever the period, kingdom, whatever the clime, it all must occur in the Republic of God; be enacted as between the day when God made man in His own image, and the day when man shall give account to Him for the deeds done here in the body. All tragedy, whether in story or drama, must presuppose the government of God, or of some other judicial power or force, which stands for God and does His work. The doctrine that there is "a divinity that shapes our ends, rough hew them how we will," is needful to justify and explain the ways of the human creator, as well as the divine. Indeed, all art has to be tested in this manner: Does it fulfil the conditions of real life? of man and God as they are in such a life? Macready, the great Shakespearian actor, says that "Shakespeare's work had always seemed to him nearest to that of the great Creative Mind of any that man has ever done." This is the highest praise which could be framed. This is the secret of its power. For just as the true art of the painter is not to make a fine painting, but to put upon canvas some of the thoughts of God in nature, so the true art of the dramatist, is to give us upon the stage, man as God has made him and as sin has marred him.

In his lecture, "The Hero as a Poet," Carlyle has subdivided the poetic function thus: "The Vates prophet has seized the mystery, life, on the moral side; that is, duty and prohibition, right and wrong. The Vates poet has seized life on the æsthetic side, as the beautiful, and the like." But he afterwards adds that "these two provinces run into each other, and cannot be disjoined." "Without hands," he says further, "a man might have feet and could still walk; but consider it, without morality intellect were impossible for him; a thoroughly immoral man could not know anything at all. To know a thing, a man must be virtuously related to it." Carlyle is not alone in this: our own Emerson has said it in this form: "The spirit only can teach. Not any profane man, not any sensual, not any liar, not

any slave, can teach; but only he can give who has; he only can create who is. Courage, piety, love, wisdom, can teach; and every man can open his door to these angels, and they shall bring him the gift of tongues." And Goethe himself has said, that "unless the heart is in perfect sympathy with the head, the comprehension of any work of art is impossible." While a greater than all the great men of the earth has taught that "if any man will do His will, he shall know of the doctrine"; "he that doeth truth, cometh to the light." That is, a man must love an art before he can understand it; must obey the laws of virtue before he can comprehend them, and must, in some true sense, be ready to walk with God in nature, art, and life before he can find God there. The soul must be polarized by the truth in order to find the truth.

After these statements, it will not be so surprising to find Ulrici, the great German critic of Shakespeare, claiming "that Shakespeare's invention, composition, language; in short, his dramatic style derives its most decided peculiarity from his particular view of that relation between God and the world, from which the nature, life and the history of humanity first derive their true import: namely, his poetical apprehension of the universal system of things, which is essentially based upon Christianity and its leading ideas." Nor shall we be surprised to find, as we turn again to Carlyle, this admission, that "The Christian faith, which was the theme of Dante's song, had produced that practical life which Shakespeare was to sing."

The life which constituted Shakespeare's material grew out of Christianity. Turn from the 51st Psalm to the soliloquy of Hamlet's uncle, and you will see what Ulrici means. These two royal sinners belong to the same race, and are shut in by the same limitations. Here is no longer the struggle of a god like Prometheus, bound by the iron chains of necessity to a rock in the midst of the sea; but a free man, as a ship caught in the breakers, is struggling to right himself, before the God of all the earth, as he tries to pray, before he goes to pieces forever. As face answers to face in the water, so the man in the 51st Psalm answers to the men in this soliloquy. And, I say, Christianity made that soliloquy possible. It is indeed always somewhat difficult to find

the author in his works. And yet in such a case as this, where a condition is under discussion which is fundamental, reaching down to the bed-rock of being, there can be no doubt that we discover the author, in his inmost soul. This is what Shakespeare himself knows of great inward conflicts. Recall extracts from some of his sonnets, for example, this:

"Poor soul, the centre of my sinful earth,
Fooled by those rebel powers that thee array;
Why dost thou pine within, and suffer dearth,
Painting thy outward walls so costly gay?
Why so large cost, having so short a lease,
Dost thou upon thy fading mansion spend?"

Or again, this, in allusion to sinful pleasure:

"Perjured, murd'rous, bloody, full of blame,
Savage, extreme, rude, cruel, not to trust,
Enjoyed no sooner, but despisèd straight;
Past reason hunted, and no sooner had,
Past reason hated."

Or finally this, which refers to some attractive one, whose charms are a perplexity and a mystery even to his magnificent nature:

"O from what power hast thou this powerful might,
With insufficiency my heart to sway;
To make me give the lie to my true sight,
And swear that brightness does not grace the day?
Whence hast thou this becoming of things ill,
That in the very refuse of thy deeds,
There is such strength and warrantise of skill
That in my mind thy work all best exceeds?
Who taught thee how to make me love thee more,
The more I hear and see just cause of hate?"

Here is a man in whose bosom is going on the eternal warfare between good and evil; and you can witness it, as the work of bees is watched under a glass case. And this warfare is recognized by him as in every human being; and this gives verisimilitude, truth's likeness, life-likeness to all his works. Shakespeare's characters are men whose very dreams may be haunted by sinful thoughts, as Job fears his children may have cursed God in their joys unwittingly; as a chained watch-dog growls in his sleep. Much as I admire the great and varied intellectual endowments of Goethe, who towers up among men as a kind of

colossus, as though superbly conscious of his great proportions, there is something almost like the frigid nonchalance of his own Mephistopheles; something almost fiendlike in the manner in which he alludes to his intimacies with the various young women who in his early life were fascinated by his rare physical beauty and the brilliancy of his genius, giving a literal interpretation to his philosophy: "New love, new life!" Evidently, he was using all life to furnish him material for his work as an artist; counting the heart-beats, which quickened at his footfall, to write them down in his book. And the spirit in which he tries to console the young friend Kestner, the secret privacies of whose family had been laid bare to the public eye, simply to furnish him material for his "Werther," shows this to be the fact. It shows also, dare a man say it, the poverty of his inventive faculty. As though a man had taken his subject for morbid anatomy in his own social circle!

All Shakespeare's plays presuppose the great fundamental doctrines of the Bible. These great doctrines are their spiritual stage-scenery. Indeed, it is one of the providential things in him as a phenomenon, as himself from God in history, that this is true. It is a wonderful fact that you can hear the voice of God walking in all his plays. Here is the most princely mind the world has ever produced, made to conserve for all generations the fundamental truths of the Bible: embalm them with more than Egyptian embalmment; nay, better, constitute them as the English drama's immortal environment. A student of English literature finds the same moral atmosphere in Shakespeare which he finds in his Bible; the same nearer and remoter horizons which he finds in his own soul. The whole trend of his works is just as really to justify the ways of God to men, as that of Milton's works: another phenomenal man raised up by God on another plane to put the fundamental things of His government into English literature. It is these doctrines of God and of God's things in Milton that differentiate him from Homer and Virgil. And so long as Milton and Shakespeare stand as high priests at the portals of the great temple of English literature, it seems utterly impossible for cultivated English minds to believe in unbelief. Shakespeare has given immortality to a vast organic, living,

breathing world. It is in one sense imaginative. In another sense it is the most real world in existence. These men and women of his never will die. They cannot die, unless you annihilate the whole human family. The time will no more come when the soliloquy of Hamlet's uncle will be forgotten than when the 51st Psalm will be forgotten. They will go into eternity with every soul that reads them; they are elemental in every soul, read them or not. They are both of them on the bed-rock of humanity's life. The human soul responds to them everywhere; in all ages, in all latitudes, languages. The vitality of these creations of Shakespeare, may seem to some people to consist in the fact that they have been delineated by an immortal genius. It does consist in the fact that Shakespeare has given them the image and likeness of real humanity, has environed them as man is environed, has endowed them as man is endowed, has given them horizons eternal. It is more than true of them all, as he wrote to the Earl of Pembroke:

> "Your monument shall be my gentle verse,
> Which eyes not yet created shall o'eread ;
> And tongues to be, your being shall rehearse,
> When all the breathers of this world are dead ;
> You still shall live, such virtue hath my pen,
> Where breath most breathes, e'en in the mouths of men."

There must be such a thing as genius for spiritual truth in nature. It is the highest kind of genius as to nature. It is not characteristic of all gifted men. Some men of genius magnify that only which is beautiful to the natural eye, that which is purely sensuous, things seen and temporal. There are things in nature, art and life, which are not seen and eternal. There is not in all men a sense of moral responsibility as though they were acting as in the eye of their great Taskmaster in their minds or in their work; such, for example, as was in the mind of Milton. The endowment of creative genius without this genius for spiritual truth, may be the source of almost immeasurable temptation. An unusual sense of beautiful things and enjoyment of them as they are in nature and art and life, an exuberance of fancy and sensibility, as though one were drinking life's elixir as from the original fountain, as though he were living always in life's springtime, breathing the

scent of apple-bloom, basking in the rays of the genial sun, just back from his trip southward: a kind of luxury of living in a gifted nature; this, no doubt, makes one especially susceptible to temptation through the outer man. For example, when he is depicting the passion of love, we notice that Burns derives almost all his similes, pictures and fancies from outer nature. He has found them in her book, nay, he has felt them in his own environment there, and so sets them down. The foliage of the woods, the murmur of the waters, the fragrance of the hawthorn and birch, the wanton springing of the flowers, the amorous twining of the branches and the vines, the love-songs of the birds, as these are introduced into his poems, show us the susceptibility of his nature to sentiment and passion even as outward objects addressed him. And Burns seems to have something of this kind in his mind, in his address to the "Unco Good," where he writes:

> "Think when your castigated pulse
> Gi'es now and then a wallop,
> What raging must his veins convulse,
> That still eternal gallop."

Take, by way of contrast, the genius of Christopher North. In his "Life," by his daughter, occurs this passage, illustrating her father's susceptibility to the higher influences proceeding from nature: "At no time did my father ever appear so free from care as when communing with nature. With him it was indeed communion. He did not, as many do, when in the presence of fine scenery, show any impatience to leave one scene in order to seek another; a restless desire to be on the top of a mountain, or away in some distant valley, but he would linger in and about the place his heart had fixed upon to visit. All he desired was there before him. It was almost a lesson to look at his countenance at such moments. There was an expression of melancholy, awe, and silent gratitude; a fervent, inward emotion pictured outwardly. His fine blue eyes seemed in and beyond nature; it saw some vision that beatified the sight of earth, and sent his spirit to the gate of Heaven." Christopher North was a born naturalist. I use the word in its broader sense.

Language all comes directly or indirectly from nature, thought, beauty. Language is derived from nature's hieroglyphics. Nature is all the while moving in panorama across the eye's field of the true naturalist, giving intimations of the deep things of God. But the surface-observation of nature, that use of nature, for example, which Burns made to depict or give setting to his own personal sentiments and passions, legitimate as it is, and even employed in some passages of the Bible, is not the highest use to which she can be put. In her flowing vesture of spring-time, nature speaks thus; but it is not all her language. There is nothing more beautiful in any language than some of the allusions to nature in the Song of Solomon : the book is a treasure-house of sweets, is like poetical ointment poured forth. It is redolent of all the amorous sensuousness of material things, rhythmical with bird-songs, odorous with sensuous delights as a garden. There never was a completer picture of awakening life and love, nature pulsating again, as though the great Creator were stooping over her, and breathing into her nostrils the breath of life as at first; man, God's creature, even in his materialistic vestment, rising up to go forth and regale himself with the sights, and odors, and sounds, which make glad the earth. But there are deeper things in nature than these, better things, holier things. Says Emerson : " This beauty of nature which is seen and felt as beauty is the least part. The presence of a higher, namely, of a spiritual, element is necessary to its perfection. The high and divine beauty which can be loved without effeminacy is that which is found in combination with the human will. Beauty in nature is not ultimate; it is the herald of inward and eternal beauty, and is not alone a solid and satisfactory good. It must stand as a part, and not as yet the last and highest expression of the final cause of nature."

This is all true, and the highest and best poetry illustrates its truth. Even Shelley moralizes in his brilliant poem to the skylark. He turns at last from the rollicking abandon of the bird, which he calls first a spirit, then a cloud of fire, then an unbodied joy, which he compares to moonbeams, raindrops, a hidden poet, a maiden in a tower, a glow-worm golden, a rose embowered, the sound of vernal showers, whose utterance he

never heard equalled by song in praise of love or wine, by chorus hymeneal or triumphal chant; and sadly says of humanity:

"We look before and after,
And pine for what is not,
Our sincerest laughter
With some pain is fraught;
Our sweetest songs are those that tell of saddest thought.
Yet if we could scorn here,
Hate and pride and fear,
If we were things born here
Not to shed a tear,
I know not how thy joy we ever should come near."

He does not indeed come to the conclusion that if man were as true to what his Creator meant when He made him in His own image, his song would have some of the same qualities; but he thinks that if the lark could teach a poet how to sing, he would soon have the world at his feet. The highest elevation of this thought is so inferior to that of Wordsworth on the same theme that it is worth noticing. Wordsworth closes his poem thus:

"Joyous as morning,
Thou art laughing and scorning;
Thou hast a nest for thy love and thy rest,
And though little troubled with sloth,
Drunken lark, thou wouldst be loth
To be such a trav'ler as I.
Happy, happy liver,
With a soul as strong as a river,
Pouring out praise to the Almighty Giver;
Joy and jollity be with us both!
Alas, my journey, rugged and uneven,
Through prickly moors or dusty ways must wind;
But, hearing thee, or others of thy kind,
As full of gladness and as free of heaven,
I with my fate contented will plod on,
And hope for brighter raptures when life's day is done."

The spiritual interpreter of nature finds in her what the great Creator has put there, to tone up man's mind for his life's struggle and conquest—the moral element. That it is there is seen from the insensible influence of nature upon different nationalities, upon national characteristics, upon language, upon history. The grand free peoples of the earth are among the hills whose

language is strength; breathe the invigorating air of high elevation; endure the hardness of stern winters; battling with the storms; confronting the elements; finding inspiration to encounter obstacles and to conquer difficulties in the very environment of their natural heritage. God puts them to tuition there for great deeds. The weaker peoples are among the effeminating influences of the tropics. Their whole lives are day by day. They are the human ephemeræ, breathing not the breath of eternity which fits a man for his daily duty as in the sight of God, but the breath of a day. Nature is the material analogue of the Creator's mind. Nature is the material mentor of her foster-child man, who is impressed by her whether he will or not; who learns to walk by clinging to her skirts; who catches his first sounds from her mother lips.

The parables of the Man, Jesus of Nazareth, who was more a man than any other born of woman, are not artificial things. They are in the very way the world has been made. Here in them is the Creator, the moral Governor, interpreting His own works. How simple these thoughts to us! The archetype of man's fatherhood is the fatherhood of God. The archetype of the prodigal son is a fallen race. The archetype of the shepherd's life is the life of the Good Shepherd. It is not what might be spoken of as originality, as though these correspondences had been for the first time constituted by Him, as in Palestine He unfolded them for all time. They had been put by Him into nature herself when He laid her foundations. He was brought up with her. The Sower was there among men, teaching the great moral principle, that whatsoever a man soweth, that shall he also reap. He was there from the beginning. The Shepherd was there with the spiritual meaning of His avocation; the everlasting hills teaching God's godhead.

When you come to compare the fables of Æsop, for example, with these parables of the great Teacher, with similar work attempted by any mere human teacher, the failure is right here; there are no such correspondences in nature. Æsop makes his animals talk Æsop's language; there is ingenuity, there is wit, there is moral instruction; but they are not founded in nature herself. They are often violations of nature. She says, "They

are not in me." The Saviour taught through correspondences, not through cunningly devised fables; correspondences which are eternal facts, and therefore His teaching never can be eliminated from the soul. He taught through correspondences which were just as really in nature as the science of geology, or any other physical science, is there. And just as puerile as are the spurious Gospels, so puerile are the teachings which have sometimes been put into the mouth of nature by men uninspired. It is just so in the matter of poetry. The Vates-prophet finds in nature what moral lessons God has put there; the Vates-poet, what lessons of beauty. And where the two combine in a single archetype, God's work is reproduced. The Saviour's parable of the lilies of the field has as much natural beauty as moral. "They toil not, neither do they spin." They live by simple trust in God, for that sentiment is implied in their fragile structure, their exposure to the rough winds of heaven, and the foot of man and beast. What tender thoughts Burns derives from the crushed daisy! God put them there. Wordsworth closes his "Ode on Immortality" with these words:

> "Thanks to the human heart by which we live,
> Thanks to its tenderness, its joys and fears,
> To me the meanest flower that blows can give
> Thoughts that do often lie too deep for tears."

He implies here that the moral meaning of nature is eternally conditioned in the soul of man; in the tenderness, joys and fears of the heart of man. Of course, what is called the language of flowers is largely artificial. But for all that they have a language, just as really as the great deep calling out across the continents to brother deep; the great mountains lifting up their eternal baldness to the Ancient of Days, and greeting each other as the morning sun puts on their daily coronets of gold; the great worlds which furnish their eternal circuits of obedience, singing as they go.

But there is a genius for spiritual things in human life as well as in nature. Why not? There was something in Shakespeare, the greater greatness of the man, which led him to select such themes as "Hamlet," "Macbeth," "Othello," "The Merchant of Venice," "King Lear," and to find in them the moral and

spiritual significance which lay hidden there. It is not intellect alone which turns the mind to great themes, which gives it recognition of what deep things are in them. It is a genius for moral and spiritual things. Goethe finds in Hamlet mostly this: a great task put upon an incompetent agent; an oak planted in a flower-pot, and the pot going to pieces as a tree grows. He does not define why that task is too great. But the truer interpreter of "Hamlet" will find far more than this. In the appearance of the spirit of Hamlet's father he will discover how a crime against the family, God's creative unit; nay, any great crime against God's creature man, awakens against it the forces of the eternal world; goes beforehand unto judgment to testify there; cries up to God from the ground. In Hamlet's bewilderment and indecision he will find the incompetency of any finite mind to take upon itself the function of vengeance which is God's; how it goes utterly to pieces when it thinks of doing upon a fellow-mortal that infinite thing which belongs only to God, not merely because God has reserved it to Himself, but because He only is competent to it. Viewed in this light, the ghost does not appear for spectacular effect, as it seems to the child-mind, whether in man or child, but to overshadow the whole play with an atmosphere of the supernatural; to bring down about it the eternal horizons with the worlds wheeling there; to stir the listeners with thoughts beyond the reaches of their own souls; to awaken the sense of things not seen and eternal. It is very wonderful how Christian is the environment in this whole play. The soliloquy of Hamlet's uncle is perhaps the best heart-searching analysis which a poor, struggling mortal ever administered to himself as he looked at his unforgiven sin; the most accurate delineation of natural and moral ability ever put into an object-lesson. Hamlet's father has been sent to judgment without the last offices of the Christian Church, which were in theory administered only when a sinner has repented of all his sins. And Hamlet will not take the life of his uncle while he is praying, lest he send him straight to Heaven, showing that he has the correct idea about forgiveness as something between the soul and God, as dissociated from priestly offices. If we turn, again, to the history of King David, we find his crime

like that of Hamlet's uncle, while in character Uriah deserves the tribute Hamlet pays his father. And the parable of the prophet Nathan is in part for the purpose of doing for David what the internal play in Hamlet was expected to do for his uncle, to bring him to self-recognition, to make him blush his guilt. Here, too, the supernatural is introduced because it was really there, as it always is in all human history; nor is it mere poetry that finds the moral and spiritual in the story, finds retribution there. Absalom appears on the scene by the wholesale and under the open sky, to dishonor his own father, as that father had clandestinely dishonored Uriah; while Solomon, the proud son of this dishonorable alliance, in his own person, in his own fate shows how sinful tendencies go to seed in a single generation; and in spite of all his love for nature and knowledge of it, and phenomenal wisdom, disappears from the sacred history under a moral cloud, as though that of eternal darkness.

This analogy between Shakespeare and the Bible, because both are alike true to what is really in human life, is seen also in another play—that of "Macbeth." The great dramatist begins with the same expert handling of the supernatural, but now with reference not to retribution, but to the knowledge of the future and the certainty of the future, as affected by such knowledge; while no other play so thoroughly lays bare what it is to have a conscience and to have offended against it. Just as the witches meet Macbeth and tell him of his coming honors, so the prophet Elisha meets the great captain of Syria. Just as these witches say to Macbeth,

> "All hail Macbeth, that shall be king hereafter,"

so the prophet says to Hazael, "The Lord hath shewed me that thou shalt be king over Syria." And the moral effect of this knowledge is the same in both cases. It is the occasion of an overmastering temptation. It stimulates to sin. At first Macbeth replies:

> "If chance would have me king, why chance may crown me,
> Without my stir."

At first Hazael says, "Is thy servant a dog that he should do this great thing?" But in the end the result is the same; the thing suggested is the thing that is done; they both ascend the throne

over the dead body of their king. They both take guiltily what they might have had innocently. Hazael is conditioned just as was Macbeth, with the exception that, so far as we know, there was no Lady Hazael to stir him up to the deed, though doubtless it would be artistic to create one, as even Pilate's wife figures in the death of our Lord. Here, as in Hamlet, are Christian conditions. "Every man is tempted when he is drawn away of his own lust and enticed." "And sin, when it is finished, bringeth forth death." "Oh, wretched man that I am, who shall deliver me from the body of this death?"

It is true, indeed, that a man may have this spiritual sense as to his work and not obey it in his life. He may see the eternal laws of right and wrong, according to which God governs the world; he may put them into his creations, as by a divine art-impulse, as by a creator's instinct, and not be ready or able —as we use the word—to conform to them himself. He may immortalize his own name in connection with that even of some sacred character or sacred subject, and yet not come under the influence of either; he may cut his name into the wood of the cross, and yet never take it up for himself. For example, the man who has put into imperishable stone the group of Christ and His Apostles at Copenhagen; the man Thorwaldsden, who almost died with his chisel in his hand as he was at work upon the unfinished face of his "Martin Luther"; whose mind seemed to have had a natural appetency for the morally sublime; who made his statues with the beauty of Greek art, and yet with the austerity of his own native Northland, and who turned away in his last years to especially Christian themes as most satisfactory to his genius, did his Christian work in a philosophic rather than Christian spirit. A friend having said to him, one day, that the fact that he had no religious faith must make it difficult for him to succeed on religious subjects, his reply was: "If I were altogether an unbeliever, why should that give me any trouble? Have I not represented pagan divinities? Still I do not believe in them." And here arises the fallacy of the argument against the doctrines of the Christian system, derived from the fact that so many men of pronounced genius have not been technical Christians. Men of genius have too often been men whose lives

made it inconsistent in them to believe in the Bible. It is claimed that Burns did not believe in Christianity. On what ground? Because he travestied false professors of it; because he wrote "Holy Willie's Prayer," "The Holy Fair," and other satirical pieces. But does he not speak reverently of his father's religion? And has he not told us what he thinks of true piety in "The Cotter's Saturday Night"? It is more than possible that the religion of the Saviour was as much travestied by the lives of some of his contemporaries, who were nominal Christians, as by Burns himself. It has been said by one of his biographers that the religion of his period was "coarse, fierce, vulgar, wrathful, repulsive." And we may add that those who possessed it were often guilty of the most flagrant departures from the precepts of Christianity, as well as the rules of morality; though I think that we are not to believe all of Burns' intimations and allusions to this effect. No doubt there was misrepresentation on both sides, and on his side the misrepresentation is immortal. But as to Burns' opinion of himself, take this passage from his own hand: "I have been this morning taking a peep through 'the postern of time long elapsed,' as Young finely expresses it. 'Twas a rueful prospect. What a tissue of thoughtlessness, weakness, and folly! My life reminded me of a ruined temple. What strength, what proportions in some parts! What unsightly gaps, what ruins in others. I kneeled down before the Father of Mercies, and said, 'Father, I have sinned against Heaven and in Thy sight, and am no more worthy to be called Thy son.' I rose, eased and strengthened."

I never had a doubt that Burns accepted the fundamental doctrines of Christianity. I find them implied in all he wrote. Indeed, in a letter to Mr. Dunlop, dated June 21st, 1789, he says so, in so many words. He acknowledges belief in God, in accountability, in an eternal distinction between right and wrong, in a future judgment, and in the divinity of the Saviour. And yet with his strong nature, his fondness for the admiration of his associates, his wonderful gifts, it is not strange that he should be out of relations with the kind of Christianity of his period; especially as there would be very little charity for his improprieties and vagaries, his vices and sins, and as his own conscience

could not be at rest respecting them. I say there is no evidence that Burns ever rejected the Christian system. But if there were, it would be enough to say that the conditions of his life made it necessary for him.

Take now such a man as Carlyle. There is nothing to say against the purity of his character. If not a model husband he was, at least, the husband of one wife. He began housekeeping with his new wife, with the good Scottish custom of family prayers. And when his noble father died, he sent word to his brother at home to keep up the old family custom, not to let the family fire go out on God's altar. But the whole tendency of his maturer writings is to lead one to doubt whether he retained the old traditionary belief; nay, the rather to believe he drifted far away from it. In John Sterling's analysis of the hero of "Sartor Resartus," we have a pretty correct idea, probably, of Carlyle's later religious belief. Sterling says of Teufelsdröeckh that "though he has a deep feeling of the beautiful, the good and the true, and a faith in their ultimate victory, yet he does not believe in a personal God! And, therefore, wanting peace himself, his fierce dissatisfaction fixes on all that is weak, corrupt and imperfect around him, and instead of a calm and steady co-operation with all those who are endeavoring to apply the highest ideas as remedies for the worst evils, he holds himself aloof in a savage isolation, and cherishes a stern joy at the prospect of that catastrophe, which is to turn loose again the elements of man's social life, and give, for a time, the victory to evil, in hopes that each new convulsion of the world must bring us nearer to the ultimate restoration of all things, fancying that each may be the last." This analysis of Teufelsdröeckh is, as it strikes me, really an analysis of Carlyle himself. There was that in Carlyle which unfitted him for all co-operation with the men of his own generation, in their efforts to make better a lost world. He could not appreciate the grand movements in history which have made possible America. Any conception that this world is to be regenerated by convulsions, and not by downright hard work under the captaincy of the Great Captain, just throws a man out of the ranks, makes him a sore-head and a grumbler, a cynic and a fault-finder; and all these was Carlyle.

To this same John Sterling, too—whom, alas, Carlyle succeeded in corrupting from the simplicity of the Gospel—are we indebted for a good analysis of the characteristics of Goethe, Carlyle's great master, though it has always seemed to me that, with the exception of the power to put his thoughts into lyric form, Carlyle was greater than was his master. I do not know of anything in the prose of Goethe which is comparable to "Sartor Resartus," or "Hero Worship." I mean as evincing creative genius. But to the analysis as Sterling gives it: "Goethe was the most splendid of anachronisms, a thoroughly, nay intensely, pagan life in an age when it is men's duty to be Christian. I never take him up without a kind of inward check, as if I were trying some forbidden spell; while, on the other hand, there is so infinitely much to be learned from him, and it is so needful to understand the world we live in, and our own age, and especially its greatest mind, that I cannot bring myself to burn my books, as the converted magicians did, or sink them, as did Prospero. There must, I think, have been some prodigious defect in his mind, to let him hold such views as his, about women and some other things, and I find so much coldness and hollowness as to the highest truths, and feel so strongly that the Heaven he looks up to is a vault of ice, that these two indications, leading me to the same conclusion, go far to convince me that he was a profoundly immoral and irreligious spirit, with as rare faculty of intelligence as ever belonged to any one. I never take him up without high admiration, or lay him down without real sorrow for what he chose to be."

The French Vinet, who is certainly one of the most acute of critics, and a great man and great literary teacher, too, says: "All literature is profane; Christianity can have no literature of its own; it must wait till it has a world of its own." I do not quote this as wholly true. For he admits that one must be a Christian, rightly to read Moliere, Lafontaine, or Goethe. While in his judgment, strictly speaking, the only real Christian work ever done by a great mind thus far is the work of Milton. Of course the work of John Bunyan deserves the same classification. We would rather say, what we have found out in this discussion, that all highest work of genius must be conditioned in the great

doctrines of the Bible. The Margaret character—always so touching to human sensibilities—figures very largely in literature. In Walter Scott she is Jeannie Deans, in George Eliot's "Adam Bede" she is Hetty Sorrel. But there is no ideal treatment of this character which does not necessitate the interposition of the powers of Christianity, of the blood of cleansing, the words, "Neither do I condemn thee." In Faust, indeed, there is a voice which comes from Heaven, after Margaret has died: "She is saved!" But this announcement is as different from salvation by repentance, from the "Depart in peace" of our Lord, as theatre-thunder is different from the genuine article, where the Creator is riding upon His chariot in the sky. Read over the scenes in "Adam Bede," and see how emphatically the author conditions the salvation of Hetty on that godly sorrow which worketh repentance unto life; and then recur to Goethe's flippant and superficial treatment of the same theme. It will show how the highest art comes at last to the foot of the Cross, and lays all its real successes there.

Inasmuch as literature is the picture of real life, perhaps it is not to be expected that literature shall be any more Christian, than Christianity, nominally so called, is Christian. This, however, we have a right to demand, that literature shall leave the destiny of historic characters—especially those of the Bible—where history has left them; shall not seek to supplement the decisions of God in history, or in revelation, by a poetical treatment which the facts, so far as known, do not seem to warrant. For example, when Robert Browning closes his poem on King Saul by holding up to him an anticipation of salvation through the Atonement, it seems, at first glance, a handling of sacred things which is not only unwarranted, but irreverent, if not blasphemous. Let me quote, as put into the mouth of the boy David, who is seeking to allay the dark spirit within him:

> "Oh, Saul, it shall be
> A Face like my face, that receives you; a Man like to me,
> Thou shalt love and be loved by forever; a Hand like this hand
> Shall throw open the gates of new life to thee. See the Christ stand!"

This is no less unhistoric than it is an anachronism of centuries. And yet there is a kind of rhapsodic, of prophetic, speech which

might make even such language on the lips of him who saw in vision his Lord and our Lord, a poetic possibility, perhaps permissible; though the morality of the conception is questionable.

Christianity is the highest thought of the infinite intelligence of the universe. If this is true, what kind of treatment has she a right to demand of the most gifted minds which God sends into the world? There can be but a single answer to this question. If there are minds princely in their endowments, where shall we look for the recognition of the wisdom of God if not to them? When Daniel Webster died, Mrs. Stowe, in substance, said: "What a grateful thought that such a magnificent mind as this man's should be ushered into the presence-chamber of the great Creator to study His works forever." Earth herself is such a presence-chamber. Such minds are already here amidst God's works, material, moral, spiritual. If the bestowment of great intellectual gifts brings immunity from anything, it is not from recognizing God, where He is, and where He is to be found; nay, where He is found by those who diligently seek Him. The Apostle Paul, confronting the best things that Greek philosophy had ever done, bringing the academy into the presence of the Cross, of the truth as it is in Jesus, asked: "Where is the wise? where is the scribe? where is the disputer of this world? Hath not God made foolish the wisdom of this world?" And a greater than the Apostle has put this in a prayer to His Father: "I thank Thee, O Father, Lord of Heaven and earth, that Thou hast hid these things from the wise and prudent, and hast revealed them unto babes." And this does not mean that Christianity is for the weak-minded. It means that it is not for the great-minded alone. It means that when such a mind as that of Bacon, Newton, Bayle, Clarke, Leibnitz, Grotius, Pascal, Arnold, Nicole, Malebranche, Bruyere, Bossuet, Fenelon, Massillon, Bourdaloue, Chalmers, Shakespeare, Milton, Agassiz, accepts Christianity, it is on the same basis of the wayfaring man though a fool! It is not greatness of mind which leads any man to reject Christianity. It is intellectual pride. It is when men by wisdom know not God; agnosticize God. It is the determination that every thing that is claimed for Christianity shall be subjected to intellectual tests, shall be accepted or rejected on such tests alone.

The final test of Christianity is an obedient spirit. He who enters Christ's kingdom comes as a little child; lays even his agnosticism there as belonging to God.

The pursuit of literature is a guild by itself. It constitutes a new brotherhood; nay, more, it is a kind of religion; as Carlyle has shown, a hero-worship. The great teachers in literature, in proportion as they are not Christian, are teachers who in some true sense become the substitutes for the teachers of Christianity to its votaries, as with some men a secret society takes the place of the Church of Christ. Goethe, Carlyle, Emerson even, just in proportion as they are guilty of looking at the present economy of things, as though God were ignorant of it, or helpless respecting it, or as though there were no God at all, or they had nothing to do with Him, become to their readers the priests and prophets of no religion. To be treated as a literary lion; to be regarded as an authority in matters of taste, of creative art; to be at the head of a coterie of literary worshippers—this is one fascination and temptation to the man of genius. "I must tell you something," writes Goethe to the Countess Von Stolberg, "which makes me happy; and that is, the visit of many excellent men, of all grades and from all parts, who call on me often, and stay some time. We first know that we exist, when we recognize ourselves in others." Goethe was not more than twenty-six before this homage was proffered him. His residence at the court at Weimar, where the poets of the period thronged to meet him; so near to Jena, which, as Lewes says, was to science what Weimar was to poetry, was to him what Burns found in his tavern cronies. What if Burns had had other admirers? "Well," says Carlyle, "these men of letters, too, were not without a kind of hero-worship. The waiters and the hostlers of Scotch inns, prying about the door, eager to catch any word that fell from Burns, were doing unconscious reverence to the heroic. Johnson had his Boswell for a worshipper. Rousseau had worshippers enough; princes calling on him in his mean garret; the great, the beautiful doing reverence to the poor moonstruck man." Every literary person of eminence has his courtiers, and courtiers are proverbial for homage that is as fascinating as it is misleading.

The point which I wish to make is this: that the inhaling of this incense, sincere or otherwise, offered by contemporaries, is not always helpful to Christian character. Add to this the fact that men of genius are so often endowed with a peculiarly imperial, not to say imperious, nature; are accustomed to do unusual things, and to do them unchallenged, defiantly; to set themselves above the common class of humanity in the matter of conduct, as God Himself has made them peculiar in intellectual gifts; and it is apparent that they may easily persuade themselves that whatever the moral and spiritual legislation of God respecting other people, they are in an important sense a law unto themselves. "It sank into my heart," says Jean Paul, on one occasion, "how easily is man forgotten, whether he lies in the urn or the pyramid, and how our immortal self is regarded as an actor, as absent, as soon as it is once behind the scenes, and frets and fumes no more among the players on the stage." This is the one great corrective to the unreligious, not to say irreligious, tendency of genius: to remember that God only is great; that the highest work which any man can do, is to find out what are his endowments from God; to find out where God would have him lay out his divine gifts on humanity; and then act as in the sight of God. Lewes gives us a picture of Goethe with his left hand throwing his knife into the river to decide whether he should be an artist or not! If he saw the knife strike the water, the omen was to be regarded favorable to art. How different the spirit of Milton:

> "Yet, be time less or more, or soon or slow,
> It shall be still in strictest measure, even
> To that same lot, however mean or high,
> Tow'rd which time leads me and the will of Heaven;
> All is, if I have grace to use it so,
> As ever in my great Taskmaster's eye."

Milton felt his way heavenward, as a blind man feels his way through space, with outspread palms; his other senses quickened to make good the one lost. He felt after God, to find Him in his life's work. He found Him. And his reward is, that no change of time ever can remove the mind of man away from his work. Goethe, on the other hand, never can have a germinating

immortality, never can renew the youth of his immortality as the eagle, never can be to the race any more than the old Greek poets; a study preparatory to the reign of Christianity in literature, as she already reigns in so many departments of human life, and as she will reign in literature when He who is the Word shall have put on His many crowns!

THE USES OF THE IMAGINATION IN HISTORICAL SCIENCE.

[Delivered before the American Institute of Christian Philosophy, Jan. 6th, 1890.]

By Rev. George C. Yeisley, Hudson, N. Y.

HISTORY is the life of humanity. Historical science, or history commonly so called, is the biography of the race.

While many others may be important, three things are requisite to the right study of history and its proper presentation to the minds of others. There must be a full and accurate *knowledge* of historical facts, in which, after all, history is grounded. There must be historical *faith*—a faith in God as a God of history. Let him call it what he may—a tendency to progress in human affairs—a drift in the universe that makes for righteousness—an evolution in nature and humanity that tends to their betterment—or the eternal and unchangeable decrees of Almighty God—the historian must trace through the tangled woof of history the golden thread of divine providence. He must have a soul as well as a memory. If the undevout astronomer is mad, the faithless historian is blind. As well might a mole map out the contour of a continent, as a historian, without faith in a divine order, contribute, in any true and broad sense, to the right apprehension of any historical period.

Imagination is the third great requisite to the right study of history. This faculty, whose uses are numerous and elevated in all spheres of science and philosophy, cannot be wanting in the historian. Imagination lies at the basis of all true art. As the plastic power of the human soul it enters in large degree into the composition of genius. Without it in high development no

artist raises himself above the broad and populous levels of mediocrity. With it in an unusual degree he becomes by a sort of delegated omnipotence the creator of a new world of art and beauty. History is one of the fine arts. The mind of the historian, although confined to true statements, nevertheless re-creates. His imagination, by an insight into their necessary constitution, reproduces past existences. He is an artist in the highest and truest sense of that much abused term. The imagination of the poet is, of course, more free and untrammelled than that of the historian. He can soar far above the region of fact and give "to airy nothing a local habitation and a name," yet he is great only as he sees into nature's heart and voices the truths all men feel but cannot speak. The historian must, indeed, hold himself within the bounds of well-authenticated fact, but there is room for reproduction and re-creation even here. The historian is far more than a mere annalist, an exact and scrupulous narrator of past events. He does more than keep a diary of the days of yore. He grasps the spirit and life of past generations. He clothes the dry skeleton of fact with living muscle, and puts a soul into the inanimate form of recorded events. By this Pygmalion-like power the dead past is made to speak and become the instructor of the present, and the teacher of after times. His imaginative faculty will not enable the historian to dispense with empirical knowledge, but will aid him in seeing and grasping truths which the known and carefully weighed facts but partially disclose. As a painter uses the objects of nature to gather her ideals of beauty—ideals which he liberates from material conditions which obscure while they manifest them—and thus gives nature richer expression in the free heaven of art, so the historian uses his facts to gather the historic life back of them. He discerns the spirit that instigated the known fact, and applies it to the interpretation of the results of its own activities. He thus is enabled to discover unknown yet necessary facts, which may not have been rescued from the deluge of time. The facts transmitted us from the past are few in comparison to those that are lost. Voices do not always ring out clearly across the gulf of centuries. Half-buried walls are often the only relics of once flourishing communities—ruins of cities, the sole surviving

monuments of nations that once filled the world with the fame of their civilization. A single stone of an Egyptian tomb, a bit of papyrus in a mummy's case, contains perhaps all that posterity has received of the history of a dynasty. Many are the pearls of truth which the palsied hands of the ages have let slip and fall into the gulf of oblivion. To fill out what is wanting in historical fact, and to take known and transmitted facts and reproduce them in their natural order and relationships, is one great use of the faculty under consideration.

To correct historical statements and divest facts of false coloring is another important office of the historical imagination. The facts handed down to us from the past are not only few in number, but are often colored and obscured by partiality or prejudice. From very crude ore is smelted the pure gold of historic truth. As memory fails to recall the scenes of our earliest childhood, or else recalls them colored with childish conceits and fancies, so history, the memory of a nation, in many instances fails to record the deeds which distinguish the beginnings of its national life, or else recalls them under the form of heroic legends and mythological fables. The imagination of the historian must be his guide through the intricacies of these fanciful records. By its aid alone can he unravel that strange web of history, philosophy, poetry and religion that constitutes ancient mythology. Through its power he is lifted to the vantage ground of truth, high above the mist of prejudice, the haze of partiality, the clouds of fable, where he can view events in the clear light of reality.

Still greater, however, is the importance of the faculty in the essential aid it lends to the objective method of historical study. Not only is the historian called upon to supply the wanting facts of history and divest those obtained of false coloring—he is also compelled, in order to understand aright a historic period, to judge correctly of this past life. To do this he must not view it from his own point of vision, but must transfer himself back and judge the age, the nation, the civilization, the character, from their own peculiar standpoints. He must initiate himself into, *re-live*, the life of the past he portrays, just as the scientist, by the aid of the imagination, which furnishes him with a working

hypothesis, projects himself into the realms of future discovery. Only thus can the historian obtain that true point of view which is as essential to the comprehension of an era, or an epoch, as of a landscape or a battle. Recently an eminent military critic corrected an entirely false view of a great historic character by the simple application of this faculty. He put himself in the place of the dead hero, and interpreted his conduct in the light of the knowledge he had *then*, not of the knowledge we *now* have, of the circumstances of the case. He thus was enabled to reverse a historic judgment. To judge correctly of the life of co-temporary nations we must rid ourselves of our prepossessions, and reproduce their environments. Only thus can we apprehend aright current events. Much more essential is the use of the faculty, in lifting us across the chasms of centuries, and placing us, face to face, with eyes unblurred, before some great historic epoch or amid the events of some slowly-moving era. Only as we are thus transported, our prejudices left behind, the habits of thought born of existing social conditions corrected, the wrinkles of judgment caused by our temperaments and our times smoothed out, can we reach any calm and clear understanding of past periods and peoples.

It is this last use of the historical imagination that makes it most useful to the biblical and ecclesiastical student. In the department of historical theology the right exercise of this faculty has given us much of the hermeneutical progress of recent years. The various departments of biblical criticism have been greatly enriched thereby. In the study of the Scriptures, the laws of grammar are not the only requisites to the understanding of the text. The ability to discover the meaning of a passage depends upon more than the mastery of Greek and Hebrew lexicons, or the application of the rules of a purely mechanical exegesis. The thoughts of the inspired author are behind his language. The environment of the writer gives tone and color to his thought. Words are fossilized history. The same words are not exactly the same in every period of sacred history. There are shades of difference in words spoken amid the dark shadows of Sinai and on the sunlit slopes of Zion. To the proper understanding of the language of the books of Moses,

and the lamentations of Jeremiah, or the Psalms and the minor prophets, it is needful to reproduce, both by careful study and the use of historical imagination, the distinct historic conditions and the varying circumstances of life to which these writings were addressed. If we are to put any blood into the pale, passionless faces of the conventional patriarchs and prophets, and so make their utterances in their entirety significant to us, we must place ourselves where they stood and where they spoke, under the direction of the Holy Spirit. They were not half-humanized spirits, sounding trumpets of truth from glittering mountain peaks. They were not holy machines—sacred, majestic blow-pipes of the divine afflatus. The "when" and "where" and the "who" of the inspired utterance affect not a little the "what" of the text. It in no sense impugns the divine character of Bible history to interpret its records with the same aid with which we interpret other historic records. If, as Luther says, "He only understands Virgil's Eclogues who has lived with the shepherds, and he alone understands a poet who travels in the poet's country," then surely, along with faith and learning, a warm, sympathetic, living imagination is an aid in the true interpretation of the Scriptures. In this age of biblical criticism the works of Strauss and Kuenen, the investigations and assaults of the Tuebingen school, have forced orthodox critics to the historical ground. Recent apologetes have met the attacks of the Higher Criticism, by a still higher criticism, that has followed a thoroughly historical method and employed a truly objective imagination. The shot of the foe has thus served to strengthen the earthworks of orthodoxy. When, for instance, the adverse critics of the Mosaic authorship of the Pentateuch urged the post-exilian composition of the priest-code of Leviticus, it was shown not only that the language was that of the classic period of Hebrew composition, but that its realism was that of the wilderness and the nomadic life. This whole kindergarten system of religious instruction needed, to its proper justification and unity, the wilderness tent, the rude sensuous multitudes still mindful of the flesh-pots and idolatries of Egypt. It demanded just such historic conditions as have been usually regarded as present at the time of the promulgation of a symbolic cultus

suited to carnal tempers and transition times. A sudden change of style and sentiment in the book of Amos, the introduction of certain lyrical passages, was made the ground of an argument for the presence of that Redactor whose hand is against every man's hand in the sacred volume. This mechanical theory was met through a more careful study of the stanzas and the attendant circumstances of their expression. These lyrical parts corresponded—they were fragments of some ancient hymn. They were the perorations of the preacher. By them the shepherd-prophet fixed the attention of his hearers, as he poured forth his simple yet forcible discourses, fragrant of the vineyards and fruit orchards, filled with the sighings of the summer breezes sweeping through the fig-trees and over the kine-trodden hills of Palestine.

The Scriptures, filled, indeed, with passages which no wayfaring fool need fail to understand, are no longer regarded as huge warehouses of proof-texts. They are not simply the arsenals of wordy weapons with which irate polemics may arm themselves for combats as continuous as their lives. Men prophesy according to the proportion of faith and the peculiar conditions of a surrounding civilization. They take not a single morsel, but generous portions of the holy Word, and gather their richer meanings by the use of a true historic sense. The books of the Bible are, in large part, the inspired and infallible records of a historical method of revelation, made, first of all, to a chosen people and through them to the race. The Decalogue is, indeed, not an anachronism any more than the worship of golden calves and the idolatry of the things seen and temporal are anachronisms, yet the great Law-giver comes down the grim, granitic slopes of Sinai with the tables of the Law in His hands, intended, first of all, for stupid, sensuous Israelites, dancing about a golden calf at its base. The prophets were preachers of righteousness in their day and generation, preachers without pulpits and stipends, devoid of robes and mitres, yet forthtellers as well as foretellers of truth. They represented the high-water mark of the spiritual life and theological thought of their times. Usually at odds with the priests, they, nevertheless, had an immediate, local, national work to do, and in doing this well they did the work God meant they should, for all men, for all time. By the

reproduction of their times and historic surroundings, with the aid of an objective imagination, we read the Scriptures with intelligence and profit, with greater correction and instruction in righteousness. Each part takes its own distinctive niche in the great temple reared through so many generations by so many reverent hands. The starlight of God's revealed word gradually gives place to the reddening dawn of Messiah, and this again to the high noontide of the Sun of Righteousness, with healing in His wings.

God's supreme revelation of His truth is made in the facts of a human yet divine life that leads out from Bethlehem, through Nazareth, Capernaum, Jerusalem, to Calvary. This historic life has its historic setting. It touches the life of a cotemporary civilization. It has its period of popular favor, then of gathering opposition from existing social, religious and political forces, then, of tragedy, precipitated, as it was in many features determined, by local circumstances, as well as by the love that brought us redemption. The historic setting of the life of Jesus of Nazareth was that of a small portion of our humanity who dwelt over eighteen hundred years ago in a little corner of the great Roman Empire. It is as we reproduce that life—that peculiar, provincial Jewish environment—and re-live the age of Jesus, that we fully understand the Gospels. As we enter into the spirit of His cotemporary civilization we discern best the divine order and supernatural character of the events of the life of Christ. Thus do we make clear the fact that He was not an evolution—the favored heir of the long entail of nature's best gifts—the bud and bloom of the life of his age and nation. Thus do we discover that He was from above and not from beneath. Materialistic principles like those of Hume and Draper cannot explain His appearance and character. His holy, sinless life, saturated with thoughts of the Invisible One, was in antagonism to the whole trend of His age. In touch with the eternities, He was not in touch with the spirit of the times, and His resurrection, lifting itself from the plane of human history, in its lofty altitude of conception and unapproachable magnificence of effects, appears but the natural and inevitable climax of so unique and superhuman a career.

It is to the quickening of the historic sense, again, that we owe the firm establishment of the authenticity and unity of authorship of the Acts of the Apostles. The statements of that most magnificent of epics dovetail with the facts of a cotemporary civilization. The reproduction of the diverse social, political, ethical, conditions of the cities of Antioch and Ephesus, Rome and Athens, Corinth and Jerusalem, causes the pages of Luke, the historian, to glisten with verity, as they glow with life.

The conversion of Saul of Tarsus, an event of such moment to the growth of the early Church, is now never relegated to the murky regions of "pious delusions" and "allegories," but stands out in the clear light of historical fact, a mighty headland in the history of Christianity. Plausible it may be, but not historical, when a truly objective imagination views the records, is the theory that the vision on the Damascus road was the effect, and not the cause, of Paul's mighty faith in the risen Christ. Suddenly there shone from heaven a great light round about the Church's great Apostle of progress,—and the minor differences in the account of that event are not contradictory to one who stands with Luke in the background of the narrative and enters at all into the thought and spirit of the writer. To understand the epistles in their rich entirety, is to understand also the spirit of a cotemporary civilization, and to discover its touch on the life of the early Christian Churches, as well as their sanctifying influence on human society. To reproduce the times and tempers of Timothy and Titus is the only method of entering into the significance of certain singular Pauline injunctions. We must see the pale-faced, timid, dyspeptic, withal pious and laborious pastor of Ephesus to understand why he is "to take a little wine for thy stomach's sake and oft infirmities," and "to let no man despise thy youth." We must view Dominie Titus amid his gossiping, gluttonous parishioners, gliding through life amid soft and balmy breezes and under sunny skies, in order to detect the wisdom of Paul's command, "rebuke them sharply that they may be sound in the faith." And surely the visions of the Apocalypse become something more than inspired visions, as a cultivated historical imagination brings before the mind's eye the "giant forms of extinct empires," and those "walled cities of the an-

cient realms" wherein human society, in the days long since departed, embodied their temporary stages of organized completeness.

Church history, again, from the apostolic age to the present, is "a very valley of bones, very many and very dry," except as the historical imagination enters the dismal vale and breathes life. If times ecclesiastical could be studied objectively, and reproduced in accordance with their own spirit, there would be no encouragement for the false construction of historic eras and epochs in the Church's life. Holy apostles would not then masquerade as diocesan bishops, and Jewish police-justices as elders, in contempt of all cotemporary civilization. The religious world would be spared the painful spectacle of seeing every denomination of Christians going back to the Church-fathers to prove the most diverse systems of polity and cultus from the customs and manners of the primitive Church. Church history would cease to be an autophon. Good liturgists would not then solemnly assure us that St. Peter read a liturgy and St. Paul chanted a psalter on the street corners of old Antioch and in front of the pagan porches of Ephesus. Fresh historical research, employing the high faculty of historical imagination, has led in these days to new definitions of the one holy Catholic and Apostolic Church. The far centuries of Christianity almost lost in "the sun-lit haze of its dawn," have been interpreted in their own light, and not by the light of this late afternoon of the nineteenth century. Ecclesiastical events and customs are seen to have at one period a significance widely at variance with that which they possess at another and different historical era. The drift of the day, the tendencies of the times, are noted, and allowances made for abnormal and undue variations. Exaggerations in dogmas and usages are discounted. The Church of Christ finds a historic justification for one mode of organization and cultus as it assembles in the dim seclusion of Roman catacombs. It is not to be too harshly criticised, perhaps, for a very different order and worship, as it bowed itself before the bejewelled altars of mediæval cathedrals, nor yet lauded to the very heights of inspiration, for its modes and manners, as it knelt before the star-studded altars of God, on the blood-stained heather of the Scottish hills.

A quotation from Jerome or Ignatius, from Luther or Calvin, a decree of an early council, a creed or a confession of some perplexed and *perspiring* century, is the end of all debate, only after we have stepped behind the declarations and examined the historic conditions that support them. Even in the most fossiliferous forms of rite and ritual, even amid the most azoic of the mediæval strata of ecclesiasticism, there are found, by the aid of a true historic method, some specimens of a life of faith, kindred to our own, lived by those whose scarred bodies and tonsured skulls have long since crumbled to dust. Because of this historic reproduction, confessions and creeds which bear on them the marks of conflict,—which were the battle-flags of contending hosts of God's elect—are no longer taken to spread the tables of modern love-feasts. They are treasured and reverenced for the uses they once had, and rational ecclesiasticism will not seek to mend their tattered folds for present needs. Old garments will not be patched to fit new ages, and old bottles, shrivelled in the smoke of past conflicts, made the receptacles of new wine. In this reproduction of past times and events in accordance with their own proper spirit, and thus in the more complete unfolding of the truths of history, the historical imagination has rendered indispensable and transcendent aid.

One has recently said that "reason may alter principles, but cannot change history." The Christian faith, as it is founded on a historic basis, is beyond the reach of a destructive rationalism. The historical imagination becomes the able and valuable ally of faith, as it aids in more fully discovering and in more clearly interpreting the historic elements upon which Christianity rests. This century has perceived more clearly than any other the historic Christ, coming in the name of the Father of spirits and life, to establish a spiritual kingdom in which character should be capital, righteousness the only royalty, and the free and loving service of God and our fellow-men, the supreme glory of the soul. The Man of Nazareth and of Calvary thus stands nearer to us of to-day than He did to the multitudes of Capernaum and Jerusalem nearly nineteen hundred years ago. To imitate Him, to perpetuate His blessed life, to enter into the divine mystery of His existence by a faith which sanctifies as well as saves, this the

Church to-day as never before realizes to be Christianity. That historic character, at once human and divine, standing out in wonderful simplicity and unique grandeur from the dark background of the race's history, is before men to-day, clearly-outlined, distinctly-featured—receiving the reverence of all right-minded and reasonable as well as regenerate souls—because to His life on earth has been now applied, what the past ages of the Church's history so strangely failed to do—the principles of a true historical imagination.

REALISM.

[Contributed to the American Institute of Christian Philosophy.]

By Mr. E. Coit Morris, Hamilton College, N. Y.

UNQUALIFIED Realism is the doctrine that the human mind can only conceive of real entities; that all things of which we think or speak have a real existence. But as opposed to nominalism and conceptualism, realism is the theory that universals—genera and species—are not mere figments of language or of thought, but have an objectual existence, are the essences or types of things not to be confounded with the things themselves, and that to general as well as to singular conceptions there is a concrete corresponding entity.

Without going back to the Hindoos, the germ of this theory is traceable to Pythagoras, about five centuries before Christ. None of his writings are, however, extant; his doctrines can only be gleaned from his followers. The Eleatics took up the partially-developed theories of the Pythagoreans and carried them much farther. They were the real founders of Pantheism in their doctrine that "ἕν καὶ πᾶν ἐστι ὁ θεός." The poem of Parmenides developed the doctrine of τὸ ὄν and τὸ μὴ ὄν, but in his thought τὸ ὄν became mixed with τὸ ἕν and thus identifying existence and unity he went astray.

About a century later Socrates expressed theories in regard to general notions or subjective universals from which Plato developed a notable argument for Realism in his doctrine of ideas.

But Plato used the term "idea" in a different sense from that in which we now employ it. He constrasted ἡ ἰδέα or τὸ εἶδος with νόημα and meant by it the object of conception. Therefore, since general "ideas" are the objects of conception, he held that they must have real existence, or we could have no "idea" of them.

Aristotle, rejecting Plato's doctrine, denied that ideas or universals exist separately from the individual, yet he did not deny their reality. Aristotle was weak in his ambiguous use of terms and seemed to misunderstand the true nature of the distinction between form and matter. It is sometimes asserted that Zeno and the Stoics denied the reality of universals, but the evidence is hardly in favor of such a statement. The tendency of their writings was in favor of the existence of general objects, although their system of philosophy was along other lines. They discussed moral principles and ethics rather than physical and psychological relations. This new line of thought attracted the attention of philosophers, so that Realism was little discussed for five centuries, until it received its last vital influence from the ancient philosophers through the Neo-Platonists at Rome, Athens and Alexandria.

During the middle ages Realism was earnestly discussed by the Scholastics. Their Realism was closely connected with the doctrine of divine creation and government. They modified the theories of Plato and Aristotle and rendered them much more tenable. Many theologians defended Realism in the fourteenth century; chief among them were Henry of Ghent, Walter of Burleigh, and Thomas of Strasburg. The next three centuries nurtured the first vital opposition to Realism. Nevertheless, in the seventeenth century, after the inauguration of modern philosophy by DesCartes, Realism found new advocates in Spinoza, Schelling and Hegel. They, however, carried the theory to such extremes that its errors were their own executioners. A few later writers have claimed the name of Realists, but they have scarcely deserved it.

The fallacy of claiming the actual existence of universals may be shown by *reductio ad absurdum.* Let us undertake to define, or locate, or picture a universal. Take any general object as

(*homo*) man. Can anyone define the general man which typifies all and is specifically none? Did anyone ever see or meet with this universal man? Picture him, however indefinitely, and yet some individual form must be given him. If human features be given him they immediately become specific: the nose is Roman or it is not, the hair is curly or it is not, the figure is tall or short or medium. To be sure man has been defined as "The rational animal." But no individual man can be conceived of as existing with only the general characteristics of man. In this sense no individual can be a type of the race. Again, when was this universal man born? When did he die, or how much longer will he live? For unless he was born at a given date and has died or will yet die at some certain hour, he is not like other men. Birth and death at given times and places are certainly attributes of man and must be found in a universal, if he be real.

Since this is absurd, Aristotle supposes the universal man not to exist separately, but to be in and a part of every individual. Following the Eleatics, he also became confused in the use of τὸ ὄν, τὸ ἕν and τὸ πᾶν, yet he hesitated to pursue the doctrine to its logical end. He evidently took the terms τὸ ὄν and τὸ ἕν in the actualistic sense, and as having the individualizing force of the article. Hence, since general notions cannot exist separately, they must be in the existent—the τὸ ὄν, *i. e.*, the individual.

The *origin* of general notions yields further evidence of the non-existence of universals. General conceptions are a secondary mode of thought, and are derived by a process of abstraction from individual conceptions. The process of generalization can often be traced and can always be made to account for the origin of general conceptions. Some teach that our most important general ideas are intuitionally obtained, that they are immediately originated by the mind without previous perceptions. But there is no evidence that any idea is ever obtained by the mind except either as a presentation or from a presentation—and all presentations are individual. The power of perceiving individual facts and objects, and of forming abstractions from these, and thus attaining general truths and universal conceptions is doubtless an inborn faculty; and the fact that this faculty

is developed and its power increased by use is entirely consistent with the non-existence of general objects.

The *use* of general notions also sheds some light on the question. Universals are used entirely with reference to individual or singular objects. It is only by reason of this applicability that universals have force. Through the general notion we are enabled to form judgments in regard to individuals, since whatever is true of the universal must be necessarily true of the individual corresponding thereto.

The non-existence of general notions is still more strikingly manifest in their use in indeterminate thought: for here they are made the subjects of statements which cannot be regarded even as propositions of limited or conditioned generality. In speaking of the development of science we can say, "Man analyzes the light of the heavenly bodies and determines their physical composition." The subject of such a statement is evidently a universal, yet the fact is only true of a small number of individuals in a class. From which we see that the character and name of universal, or general, are derived from the chief property and principal employment of the notion rather than from its essential nature.

The evident inconsistencies of Realism led Aristotle, Zeno and the Stoics to modify the doctrines of their predecessors. But no definite theory was substituted till the Scholastics became divided on the question, and the theory of Nominalism was broached. This doubtless had its origin in Aristotle's *universalia in re*, that is, the doctrine that general forms exist in particular objects and that general ideas are the subsequent abstractions of the human mind and derived from the objects presented to its observation. Nominalism makes the common mistake of going to the other extreme. It not only denies the existence of universals, but states that they are mere names, *flatus vocis*. It asserts that we cannot form the pure conception of any universal, but can only think of the word that designates some object as a member of a class.

The falsity of one theory does not necessarily prove its opposite, but may render a third view imperative. Nominalism did not stand the scrutiny of philosophic thought, and therefore an intermediate position became necessary.

Early in the eleventh century the discussions of Anselm and Roscellinus gave birth to a new departure in philosophy. Abelard, a disciple of Roscellinus and a noted French scholar, adopted the doctrine of *universalia in rebus*, but used the expression in a new sense. He meant by it that the universal was only conceived or thought of. But he was unfortunate in using a phrase that already had obtained a definite meaning, and consequently he was misunderstood by all his contemporaries and many of the later writers. They argued that general ideas cannot be mere products of consciousness since they could not be abstracted from the things themselves unless they were contained in them, thus falling back into the Realism of Aristotle. It is doubtless partially due to the incessant persecution of the Church of Rome that Abelard was compelled to leave his doctrine undefended and misinterpreted; though he himself probably did not realize the full extent of his doctrine. Nevertheless, he had sown good seed, and they were yet to bear fruit. The doctrine of Conceptualism, however, found no powerful supporter until John Locke became its advocate. Later it was accepted, improved and defended by Reid, and now is becoming the generally accepted doctrine.

Conceptualism denies the existence of universals, or general objects, but refrains from the opposite extreme that makes them mere *flatus vocis*. It recognizes the fact that in some way we must speak of general objects. It also recognizes that we speak of them in very much the same way that we speak of ideal existencies—we speak of them not as existing but as if existing.

The true relation of the three theories is briefly stated thus: Realism affirms *universalia esse ante rem;* Nominalism denies that assertion and takes the opposite position, *universalia non esse;* Conceptualism bridges the chasm at an intermediate point by saying that we know general objects do not exist as separate entities, yet in speaking of them we use the same language and the same thought that we employ in regard to existing things.

The chief errors of Realism and Nominalism lay in their each taking an exaggerated position that denied all truth of the other's statements. Each was too positive even after palpable errors had been found in their respective doctrines.

CHRIST THE CENTRE OF THE COSMOS.

[Contributed to the American Institute of Christian Philosophy.]

By Rev. George W. King, Providence, R. I.

A WORD that has lately come into use in the theological world is the term "Christocentric." Much is said, also, about "Christologizing" theology. The claim is made as in a special sense the privilege or glory of the "new theology." Strictly, however, this system (if system it should be called) is Christo-ethicocentric rather than distinctively Christocentric. Calvinism or Arminianism is equally Christocentric. If the "new theology" is new in any principle, it is in the ethical import of Christ's life and death. But even this is common to other systems; distinctive, indeed, of certain non-evangelical creeds. Its distinction and newness lies rather in its application of this principle in the solution of the problem of the heathen.

It is not our aim, however, to criticise the "new theology," but to carry the Christocentric thought to a wider sphere than that of theology; indeed, to a wider sphere than this world or man; to carry the Christ idea into the Cosmos.

It is not claimed that the thought is entirely new, but there may be a new way of looking at it. It is, of course, largely speculative, but not therefore either unreasonable or useless. It is not, however, wholly speculative.

One thing is revealed, viz., that Christ sustains a relation to the creation which is universal. "All things were created by Him and for Him." The full import of this, particularly the "for Him," we may not be able to grasp. But here is a cosmic relation. Other scriptures with the same import need not be quoted.

This relation must be to all created intelligences. The precise form it assumes to other intelligences than man we know not. Towards man it assumes a form of beneficence. Must we not inevitably think that it is the same toward all intelligences? The precise form of the beneficence we cannot know; but may infer a form united to the capacities and circumstances of those intelligences.

It is not a new question in speculative theology as to whether or not Christ would have become incarnate had not man sinned. And, while the answer must forever remain among the insolubles, it can be regarded neither rash nor presumptuous to hold that He would. The best Christian consciousness dislikes to think the Incarnation simply an expedient to meet the contingency of human sinning. The historic manifestation of the Incarnation assumed a character conformable to the fall and guilty condition of mankind. If man had not sinned, and the Son of God had nevertheless become flesh, the manifestation had, no doubt, been different. Precisely what we do not know. But the Incarnation as such seems not wholly the result of human sinning, so that it would not have been had not this contingency taken place. This, we say, is the best feeling of the speculative Christian instinct. And, at any rate, Christ would have sustained *some* relation toward us, whether an incarnate one or not.

The same thinking leads us to feel that the Christ by whom and for whom all things were made, must sustain a universal relation to all cosmic things and intelligences; and a relation of beneficence where that is possible by reason of the capacity or intelligence of the subject. In this world there is a divine beneficent relation to *all* animate life. Is not Christ so related? or, in other words, is He not the manifestation of that divine relation? Is He not the eternal "Logos" throughout? There is no desire to attempt to prove that other worlds are inhabited by intelligences or creatures higher or lower than ourselves; but, if this is a truth (and, as a conjecture, it is not the most improbable by any means), must we not conceive Christ as sustaining a relation to these creatures, beneficent, but peculiar to their nature and surroundings? It is not necessary to think of them as sinful in order to conceive such a beneficent relation.

The angels, we know, exist. Has Christ no relation of beneficence to them? We instinctively feel there must be such a relation, however peculiar and incomprehensible to us, as ours, perhaps, is to the angels.

If we assume such a cosmic relation, Christ may be compared to a universal orb, or to the sun in our system, looking in all directions and dispensing His beneficent rays to all parts as each

has need. To us, in our sinful condition, this universal love shines forth in redemption. Its manifestation was in the sufferings and peculiar teachings of the God-man. To the angels it has another aspect and manifestation. And, if there be other intelligences or creatures, as might, perhaps, inhabit the orbs in space, this same universal light may be thought of as shining upon them, dispensing to them as their capacities and needs may be.

Of this universal orb we can know nothing in particular, for certain, but the manifestation toward us, just as we can know something only of our side of the planets. But we know enough of this great cosmic light to be assured that wherever it shines, or toward whatever object it manifests itself, it must manifest itself in benevolence. The sun must show light on every side.

Perhaps, after all, this is the truest conception of Christ. Redemption may have its relation alone to man (and this it would seem is true, since it was wrought on earth and in our nature), except it be in its moral lesson* to other intelligences, as, for example, the angels; but the same Christ, equal unto the Father, may look all ways through His Cosmos, and by peculiar schemes, manifest His goodness to all.

This truly exalts Christ to the highest conceivable speculative glory. It also disposes of, or lessens, the speculative difficulties concerning the divine regard for this small planet and its inhabitants. If Christ sustains a universal relation to the Cosmos, then He could not be indifferent to this small part of it, nor to human beings, however high or however low in the scale of created intelligences. The story of the suffering God-man is the story of His interest. Moreover, it settles the question as to the relation of other intelligences or beings toward *our* redemption. There must be an interest and lesson for them in it, as far as they know of or know it as a fact, just as there is for us an interest in the angels in so far as we know them, and a moral lesson in the condition of those that are fallen; but further than this it is needless to assume anything. Each order of beings may have a relation to Christ peculiar to itself, and leave us in the undivided possession of His beneficent relation to us in the Incarnation.

* Col. i., 20, does not involve more than this.

LAW AND MIRACLE.

[Contributed to the American Institute of Christian Philosophy.]

By Prof. Warren Holden, Girard College.

THE difference between the advocates of law and the believers in miracle seems based upon the assumption that the two views are irreconcilable. The devout heart bows with reverent submission to the obvious teachings of the oracles of God, even when beyond its comprehension. On the other hand, where the rational faculties are allowed to speak freely, they declare the inconsistency of supposing that the Author of law and order could Himself act in direct contravention to His own laws. These antagonistic views may be reconciled by allowing that where revelation attributes to the Creator what seems to contradict rational perception, either the divine power is exercised under a more comprehensive law than has yet been grasped by the human mind, or else the human mind is misled by appearances. So long as miracle is acknowledged to be a real as well as an apparent violation of law, the scientific mind cannot help rejecting it. But science seems to assume that somehow certain laws or forces of nature have been set agoing and must thereafter continue in operation of themselves. If, however, it be granted that the life of nature is not inherent, but is continually communicated by the one infinite source of life, it becomes possible to admit further that such life may be controlled in a way not yet familiar to us.

"The wind bloweth where it listeth, and thou hearest the sound thereof, but canst not tell whence it cometh, and whither it goeth. So is every one that is born of the Spirit." To the uninstructed imagination the vagaries of the wind must have seemed among the most mysterious phenomena of nature, and hence the aptness of the above comparison. But modern science has explored the cave of old Æolus, and revealed all its secrets, so that the same illustration would not be now available.

Let us now consider the most incredible of the miracles, viz., the birth of the Lord Jesus Christ, and see how it stands related to evolution.

No animal or plant has life in itself as its own. Life is the gift of God wherever manifested; and it is not given once for all, but is imparted moment by moment. It acts through different organisms and under various conditions, but it is ever the same indivisible force. The natural sun is the principal medium through which life acts in the physical creation. Blot out the sun and all nature dies. But the sun has no life of its own. Whence comes its force? Analogy has led astronomers to conceive of a great central sun, the source of all suns. But in vain would their telescopes sweep the heavens to find it because it is none other than that "bright essence increate" of which every sun in the universe is but an "effluence." This "coeternal beam" is more intimately present throughout creation than any of its material shadows, the natural rays, can be. "Whither shall I go from Thy Spirit? or whither shall I flee from Thy presence? If I ascend up into Heaven, Thou art there: if I make my bed in hell, behold, Thou art there. If I take the wings of the morning, and dwell in the uttermost parts of the sea, even there shall Thy hand lead me, and Thy right hand shall hold me."

The body is from the earth, the spirit is from God. "Then shall the dust return to the earth as it was; and the spirit shall return to God who gave it."

When life from the All-Father is communicated through the medium of a human father, it is encumbered with his limitations. But life, communicated directly from its primal source, would be uncontaminated by hereditary bias on the father's side, and the offspring would be prejudiced only by the imperfections of the mother. Under the former supposition the wonderful intuitive wisdom of Christ, and especially His inconceivable love and divine patience, would be wholly inexplicable. But under the second supposition all difficulty is removed, and we have Emmanuel—God-with-us. The Father of eternity is known to us only through His manifestations, the highest of which is Christ. "No man has seen God at any time; the only-begotten Son which is in the bosom of the Father, He hath declared Him." Life is

divine in every sphere. It retains its divine character, whether received indirectly through the species in which it is manifested (and this seems to us the direct method), or whether received directly from God. In both cases its divine character is essential —the *sine qua non* of life. There is no common herd of men. Every man is God's handiwork, never nature's journey-work. Every man has a special place to fill in the grand final outcome, however obscure some may, for the present, appear. Therefore every man is a special creation. "Known unto God are all His works from the beginning of the world." When it is necessary, in the fulness of time, to pass from a lower to a higher type, the Life which is present in all cases acts directly without the usual intermediate. This direct action of creative energy, occurring when the progress of creation requires, is what science stigmatizes as an interference with the laws of nature; whereas it may more justly be called one of creation's periodic stages.

Bearing in mind that all life is from a single source, both in its beginning and in its continuance, and that every new form of it is a special creation, we may easily conceive that its higher and higher types take their rise by the direct operation of an immanent Creator, and thus we are distinctly told that the highest type of all, the man Christ Jesus, appeared among us. It is one life-giving power acting all the time, not in violation of law, but in strict accordance with a law whose cycle is beyond our unaided ken, but which is plain enough when revealed. Thus every missing link is supplied.

We say that God is omnipresent, but still think and act as if He were far from us. Practically we forget that "in Him we live, and move, and have our being." Omnipresence is not an abstraction, a mere figure of speech. It is the one vital reality. Think of God as the all-pervading life, ever acting in and through His creatures, but at the same time imparting to man His creature *par excellence*, a certain power of resistance or reaction, which constitutes his freedom, the exercise of which develops his individuality. If God be the principal, and man only the secondary, agent in every act of life, it seems easy enough for the principal to give His creation a new direction in the regular course of things whenever His ulterior purposes demand.

Geology may indicate some of the steps, and evolution something of the method of creation, but every act is performed by the Creator Himself. Modern evolution undertakes to present the grand drama of creation, while leaving out the principal character.

THE PHILOSOPHIC BASIS OF CHRISTIAN THEOLOGY.

[A paper read before the American Institute of Christian Philosophy, May 2nd, 1889.]

By Richard Wheatley, D.D.

CHRISTIAN theology is necessarily an incomplete science, because of the relations of the finite to the infinite. As such it must receive continuous accessions from the investigations and corrected conclusions of thinkers. "Theology," remarked a recent writer, "is not a completed science; perhaps never will be. It is the science of God, and especially of His administration over moral beings, and is practically infinite; and from the nature of the case will continue to open new mysteries of wonder forever to sanctified intelligence. Every new discovery will in some way illustrate some new aspect of it, and may modify some important conception of it. All the light has not been gained; and no theological Sorbonne is authorized to close up the investigation." Theology is a living, luxuriant growth, not a changeless crystal. Christians are apostolically exhorted to "grow in the knowledge and love of God," and the promises of our Lord to His disciples are of progressive revelations of the Father to their intellect and consciousness (John xvi., 12–15). "Not that I have already attained" is a Pauline utterance expressive of keen consciousness, and also of grand want.

Romanism counts the dogmatic coins it has inherited, and that without regard to their value. Protestantism tests and weighs the bequests of the fathers, and seeks the indefinite increase of its wealth. Throughout the first four centuries the truth as to the person of the Redeemer shone ever clearer upon

the minds, and was proclaimed more intelligibly by the voices of theologians. Since then all true progress has been along the same path. "Dogmatics as a science is conservative as to its principles, progressive as to its development;" is, in the words of Da Costa, "in its essence the fruit of the ages, in outward form of these our days." Truth is to be heartily welcomed when cognized as truth, from whatever source it comes. Neither in general science nor in spiritual truth is there any infallible interpreter; "no masters authorized to pronounce the last word, no ultimate earthly tribunal having power to close the case." The entire domain is open to us for exploration and appropriation. The only binding obligation is to seek the truth that we may do it. The individual may err, and particular schools of thought may err. "It takes humanity in its entirety to lead humanity," and in that leading, if obedient to the Divine Light, it is sure to emerge into possession of all saving truth.

Theology is a practical science. It is an end to the intellect, a necessity to the heart, an ethical guide to the life. Man must and will have God. "It is the deepest necessity his soul experiences." "Have we ever known an instinct that points not to a good? . . . The panting roe hunts the water-brooks; even the sunflower turns to the sun. Are they deceived? A deeper impulse draws us. . . . Following the matchless instinct, shall we not . . . find the inexhaustible, perennial, infinite Fountain of all good at its end,—that that which is our necessity is also our sufficiency,—that the God whom we cannot escape is also the God who will satisfy all our longings, and fill the boundless measure of our desires?" In view of the imperishable religious instinct, a right creed is of primary importance, and revelation is an absolute need.

The revelation of God's mind and will to man has been progressive, and commensurate with his religious and moral necessities. Through more than four thousand years the Deity gradually enlarged the sum of inspired knowledge, and only closed the sacred canon with the life of John the Divine on Patmos. Has the Church since then thoroughly apprehended all the meaning of its contents; or has fresh light from time to time broken upon the vision of those who prayerfully pored over its

pages? The history of the Church supplies the fullest answer. It proves that while Christian theology may be perfectible, it is not perfected; that the inestimably rich mine of revelation is not exhausted, and that solid nuggets of priceless value reward the honest toil of the patient worker.

The sources of theological truth, as indicated by Bishop R. S. Foster in the "Prolegomena" to his "Studies in Theology" * are: "The system of nature, including the material frame of things, with the forces and laws discoverable therein, the constitution of the mind itself, both as to its moral and reasoning consciousness, the actual history of events as it has become known to man in the ordering and on-going of the universe, the struggles and movements of human thought across the ages, and the holy Bible, a book which claims to have emanated from God as a revelation, containing an account of His creative acts and authorship of the universe, His doings and purposes with respect to man, and a statement of doctrines concerning Himself, and the principles and outcome of His administration over moral beings in general and the human race in particular."

The question of questions in the whole realm of thought is that of the Divine existence. The affirmative response thereto comes chiefly from extra-biblical sources. Yet the Bible itself may join in the answer. If it contain utterances of word or work which only the Infinite Mind can formulate, then is it a competent witness to the fact. But of this, as of the entire series of alleged proofs, reason is the ultimate umpire. Through whatever *media* God manifests Himself, He must be in perfect accord with Himself. All revelations, rightly interpreted, must agree, although one may transcend another. To the divine nature and character the subjective consciousness alone is not a competent guide; nor is conscience, *per se*, a spiritual organ by "which God is directly known and His will directly perceived." The latter is simply the mind passing judgment on the moral quality of its own actions, and producing pleasure or pain in the soul as these actions are discerned to be conformable or otherwise to the will of accepted authority. It stamps the individual as a moral and responsible being; but, of itself, has no cognition of God.

* *Vide* "Philosophic Basis of Theology, or Rational Principles of Religious Faith," pp. 246, 247.

The Bible is a revelation of God, clothed in the "scanty and uncertain and mutable terms of human language," yet accrediting itself and its contents to the faculties of its readers as in harmony with other statements in equally authoritative form from the same Author. Any seeming discrepancy is due to the misunderstanding or misinterpretation of one or more of the records. It must be borne in mind that all parts of the Bible do not claim the same kind or degree of inspiration. Under the established order of things "it is the prerogative of reason to judge of the credibility of a revelation." What is incomprehensible is not, for that reason alone, incredible. "The most skeptical form of modern philosophy, which reduces faith and knowledge to a minimum, teaches that the incomprehensible is all we know; namely, that force is, and that it is persistent." The function of reason is to judge of the evidence by which a revelation is supported. Only on the ground of adequate evidence do the Scriptures demand faith. "If I had not done among them," said our Lord, "the works which none other man did, they had not had sin" (John xv., 24). It is the duty of theologian and of scholarly critic to educe that sublime faith from the written word which, freed from the misconceptions and misconstructions of ignorant and partisan wranglers, "shall be acceptable to advanced intelligence and unfettered reason."

"The final and supreme arbiter in every case as to what is truth, is the mind itself. . . . It is sole and supreme umpire. It must decide what to accept and what to reject. It is responsible for the decision." Nor must it be content with the evidence at hand. Truth must be diligently pursued. Then it should believe what the evidence proves, "nothing more, nothing less." The only proper order of procedure is to ask what is claimed for the Book, and next whether what is claimed be true. "Is the entire Book a revelation, or does it contain a revelation?" Has it been corrupted; and, if so, to what extent? If claim and purity both be proven, then is it an absolute authority in matters of religious and moral belief? What the Book says, and what it means, are next to be determined. Rational interpretation proceeds on the postulate that it includes nothing contradictory to known truth, or to itself. If such contradiction should be detected, reason

may justifiably reject so much of the record. But "it is impossible that a real revelation should contain any statement or doctrine against which any valid objection of reason can be alleged; for, as revelation, *it must be true*, and nothing can be true against which a valid objection can be alleged; it is impossible, therefore, that there should be real conflict." This "is not *limiting faith* to the *comprehension* of reason; it is protecting faith from *conflict* with reason." There cannot be any testimony of God which contradicts reason. Any assumed revelation that three and seven are equal to twelve, or that holiness and sin are opposite and yet identical, would necessarily be rejected as not true, because contrary to reason. This is not rationalism, which refuses to accept anything as true that the mind cannot discover by its own unaided powers, which denies the supernatural, insists on explaining everything according to the principles of ordinary human reason, and maintains that reason is adequate to all the demands of existence. It is faith accepting as true what is adequately proven, even though it be above reason, but not contrary to reason. "The demand of reason is in perfect accord with the demand of faith, that we accept and act on matters which transcend the power of reason to discover, but which are made known to it by methods outside of its own unaided processes, just as if they were within such processes, only requiring that the discovered truths be attested by adequate evidence." "Inspiration, together with all that the word in its plenary sense implies," says Foster, "can only be needed for those special doctrines and facts which could not be known in any other way, or were not communicated by God in any other method. For such portions of Scripture inspiration becomes legitimate, and so much of the volume may, with reason, claim to be the *ipsissima verba* of the Holy Ghost." This opinion does not detract in the least from the authority of the Book, which lies in the fact that it is true; but it does relieve the expositor from many difficulties obtruded without reason by such theories of verbal inspiration as that advocated by the Rev. J. W. Burgon and other writers.

"Is there a God?" is the first of all questions. The Bible in sublimest language and in multitudinous forms affirms that there

is. It postulates the fact, but frequently alludes to the extra-biblical evidence on which the assumption rests (*vide* Psalm xix.; Romans i., 20). That evidence conveys a certain degree of information as to His nature and character, but it is to the Bible itself that we must look for the fullest instruction. The same volume must be our chief guide in the study of anthropology, soteriology, eschatology, and ecclesiology. In acquainting ourselves with the contents of these departments of theologic science we may reasonably believe that things are without knowing *why* they are. Pascal profoundly remarks that, "Two extremes must be avoided—the exclusion of reason and the admission of nothing but reason." "When the doctrines of faith are embraced and acted upon they verify themselves to consciousness;" and in "this ineradicable religious sense or consciousness is an everlasting and universal proclamation and attestation of God." It is not exclusively in the reason, or the will, or the feelings, or the conscience, that the seat of the religious principle is found, but "in the inmost sanctuary of the soul, where these are still originally one and undivided, is found the fountain-head of the spiritual life, and especially the God-life of mankind." Here rages the conflict between belief and unbelief,—that conflict which Goethe asserted to be "the deepest, the sole problem of the history of the world." Faulty psychology is injurious to the whole of theology. "The heart has its reasons which reason does not know" is a subtle but true observation of Vinet. It yearns for personal union with God, for communion in which individuality is not lost in the contemplation of God, but, on the contrary, "is preserved, emancipated, purified."

In the investigation of all sources of theological truth the student should be governed by the maxim "that the only rational ground of belief is adequate proof"; proof which consists in "a reason or reasons apprehended by the mind, which, to its conviction and in fact, establishes the truth of what is believed." In this way only may Christians formulate creeds and doctrines which, instinct with the Holy Spirit's energy, and illustrated by the lives of expositors, will command the faith and obedience of mankind.

While "no man living is able to verify all his verifiable be-

liefs," but is obliged in the wisest exercise of the right of private judgment to accept many of them on what he deems to be the competent authority of others, it is also true that proof will or may be demanded for each and all; and that proof, within the limits of his own science, the theologian should be able and prompt to adduce. The effectual corrective of error is the presentation of truth. Theologians, whatever their pretensions, are not infallible. What those of one age have devoutly believed, and, with all the outside aids at command, endeavored to impress upon their contemporaries, has been no less devoutly disbelieved by successors. Yet this is no excuse for the rejection of any part of theological truth, much more of the whole. Nor does it excuse skepticism that at the best is but the fungous outgrowth of sheer laziness. "Captious doubt is the idiot's asylum." Reason is an endowment to be used, a blessing that disused is changed into a curse. "It is another name for mind itself. It may be called intuitive, inductive, deductive, perceptive, conceptive, reproductive, cognitive, or by any other name that represents mental activity, but in every case it means the same thing; namely, power to acquire ideas, and to attain to knowledge, or come to a knowing state." Its function is to determine religious faith, to examine and test, to sit in judgment and decide on what shall be its contents.

The objection may be raised that this contention practically makes revelation of no effect, places man above his Maker, makes the subject the lawgiver and judge, and therefore is the most extravagant form of rationalism. Such objection will appear in the garb of jealous piety. But is it valid? Does not the All-Wise appeal to human reason? Does not the High and Holy One demand from it the justification of His own procedure—of His commendation or condemnation? Does He not insist that in it inheres the power to understand, accept, and interpret His revelation? Does He not affirm that in its right exercise man will discover the truth, and through the truth be able to exert all his energies in unison with the facts of the divine nature, and the principles of God's moral government? What the author of "Liber Librorum" terms the "verifying faculty" is "neither more nor less than reason enlightened and sanctified by the Holy

Spirit." The apostolic exhortation, "Beloved, believe not every spirit, but try (prove, R. V.) the spirits whether they be of God" (I. John iv., 1), supposes an ability in spiritually enlightened men to discern between that which is of God and that which is not. "Ye have an unction (anointing, R. V.) from the Holy One" (I. John ii., 20) adds this most profound of divines, "and ye know all things" pertaining to godliness. "I have not written unto you because ye know not the truth, but because ye know it." "The anointing which ye have received of Him abideth in you, and ye need not that any man (one, R. V.) teach you" (v. 27). To him and to all fellow-laborers of like spirit the promises of his Lord at the last supper were and are words of life, power, and truth (John xiv., 16, 17, 26; xv., 26; xvi., 13). The sincere and prayerful resolve to know the truth in order to do it, will, if persisted in, lead any and all men into "the faith of God's elect, and the acknowledging (knowledge, R. V.) of the truth which is after (according to, R. V.) godliness" (Titus i., 1). "The finding is that Christianity is a system of doctrines superior to human reason in its source, but attested to human reason by its evidences, and obligatory on human reason, not on any *ipse dixit* merely, but on proof; and therefore binding as a faith and authoritative as a law." Whether he have a revelation at all, whether he will accept what purports to be a revelation, each must decide for himself. Condemnation does not follow upon helpless ignorance of revelation, but upon disobedience to a revelation of which, but for criminal neglect, he might have had knowledge; and which, had he acted rationally, he would have found adequate reason for accepting and obeying.

"We are not born into truth; it must be acquired. Each mind must make the acquisition for itself." The choicest spirits must be the leaders. Whether their spirit and life be Christ-like, the dullest observer can accurately judge. If so, then in their richest gains he may share by adopting as truths what they constantly affirm to be truths. In pursuing inquiry "the mind must have an intense desire for truth." This first. Hereditary opinions and beliefs, the idols specified by Bacon—"*idola tribus*," "*idola fori*," "*idola theatri*," "*idola specus*"—must not be per-

mitted to stop or deflect the inquirer in his course. Truth must have absolute regency over the affections. Challenge may be looked upon as a friendly service. Growth and stability are the resultants of trial. Inquiry should aim at knowledge; and, where that is inaccessible, at rational belief. In any case, loyalty to truth should be absolute, and reverence for personal conviction sacred. Incidental sacrifices should be endured with manfulness.

Truth is reality—nothing more, nothing less. Its essence is permanent, its phenomena more or less changeful. The pursuit of truth is simply the mind seeking to know reality. In his "Vocabulary of Philosophy" Fleming says: "Truth has been distinguished, according as it respects being, knowledge and speech, into *veritas entis, veritas cognitionis, et veritas signi.*" Truth of being is equivalent to reality; truth of cognition is the exact correspondence of concept with objective reality; truth of sign is the adequacy or conformity of the sign to the thing signified. Human limitations make the functions of the lexicographer indispensable. In all sciences it is matter of prime concernment that signs should precisely describe objects of thought, and that thinkers and teachers should be agreed as to the contents of any and all related signs. Logical truth consists in the conformity of the declaration made to the actual state of the case. To conceive truthfully of reality, to represent reality as conceived, and to enforce it upon our fellow-men, is the one and sole object of theological pursuit. Any lower aim leads but to the Serbonian bog of doubt and error. Any passional deflection from the direct line of aim is mischievous. "Truth inherits the ages, and has in it the dower of immortality."

In answer to the query how we become possessed of the concept, or how does reality, which is external and objective, pass over into the mind and assume a subjective thought-form. Bishop Foster returns for answer that reality *does* emerge in thought, but *how* is perhaps beyond explanation. Process and conditions, however, are for the most part not obscure:

"The arranged conditions are these: a deft, highly sensitive, marvellously complex organism is provided. It is a part of the external concrete of things; but it is an organic unit composed

of living tissues—is a thing of life. In the external organism is found an inner organism, or special system, of more delicate mould, the tissues of which are infinitely sensitive—so delicately impressible as to respond to the slightest external impingement. A ripple of light, or a wavelet of shadow, or impalpable odor even, cannot cross its disk without leaving its traces. Though shrined with infinite care to protect it from the violence of rude contact, it lies open, in five disks or foci, to receive impressions from without, and transmit them, by a unique telegraphy, to a common centre, where the precise effect of impingement is registered with the rapidity of thought, and more than photographic accuracy. The external foci, which open outward to the universe, as the free avenues of approach and contact, are called the five senses. The inreaching nerves of sensation are the ducts of the impression, and the convoluted brain is the office of delivery and register. The impalpable, all-surrounding ether is the freighted highway along which impinging forces travel. Thus the objective universe plays a perpetual tune on the more delicate than æolian instrument.

"In this infinitely delicate organism a mind is posited. What is the mind? It is not the impressible nerve which receives the impression; it is not the convoluted brain in which the impression is reported; it is not a part, or resultant, of the organism; it is not a mere congeries of ideas; it is not a minutest material atom; but it is something which has in it the deepest reality of existence. More attenuate than ether, more versatile and alert than electricity, it is yet more solid and indestructible than granite or gold. Shrining itself in the innermost core of the nerves of sensation, it feels the slightest change produced by impingement upon them, and, by a mysterious power, transmutes the sensation into thought, and sends the concrete back into idea. Not apprehensible or describable under terms of matter, it is a supersensible being which thinks and feels and wills—an intellect, a sensibility, a volitional agent, immortal and indestructible."

This volitional agent cognizes the object, retains the thought-image or concept of it when the object is absent, stores up that concept as one of its permanent possessions, and recalls it with more or less of facility for contemplation at will. In conception

it is passive, in ideation, active. "Ideas are *a priori*, conceptions are *a posteriori*, and it is only by means of the former that the latter are really possible." Archetypal idea antedates concrete reality, and is the pattern after which it is finished; concept is the reproduced idea as a thought, corresponding with the concrete reality; ideas, as of truth, law, right, and the infinite, are of reality non-concreted. Such realities "are not picturable, and differ from the concept, which is propagated by contact with concrete reality."

How we shall determine which of our concepts are knowledge, which beliefs, and which mere unfounded fancies, is something we have to learn practically while formulating theological science at the several sources of theological truth. "One characteristic of knowledge holds in all knowing. . . . It is simply the mind seeing its object in such manner that doubt is impossible. It cannot be said to know anything of which it is possible to bring it to feel that it may be otherwise. That admitted possibility would show that it only believed, and did not know." According to this definition, which is undeniably a very strong one, the sum of human knowledge is not only comparatively small, but varying in magnitude with the moods of the individual. Any system of doctrine resting upon it and buttressed by appropriate beliefs is impregnable—provided it be in unison with universal experiences under like conditions. "Knowledge excludes belief. What is known by the mind cannot be reduced to any kind of belief." "Belief is that state or act of the mind which arises when it stands in such relations to objects as, while inadequate to produce knowledge, are adequate to create a conviction that the reality is this or that, and to compel the mind so to affirm." If we know that a belief is true, it passes out of the category of belief into that of knowledge. In the long and wordy controversy between the partisans of Abelard and Anselm on the question whether knowledge be precedent to belief, or the contrary, the first declaring that "*intelligo ut credas*," the second "*credo ut intelligas*"—Foster decides that "a strict analysis of the operations of the mind will show the order of mental movement to be, first, a knowing, then a believing—knowing some things subjective and objective,

and by a process of reasoning coming to believe much that we do not know." "Knowledge precludes error." "Things known *must* be as known. Things believed *may* be as believed." Many people are wont to say that they know when they only believe.

Perfect knowledge of all truth is the attribute of the Infinite; but, nevertheless, knowledge in the finite, so far as it goes, is as truly knowledge as in the Infinite. Belief is the necessity of the finite, and implies the possibility of error, doubt, and uncertainty. Intuition is held to be immediate knowing—"the mind standing face to face with reality." It instantly grasps all the self-evident truths, or knowledges, characterized by universality, necessity, and unthinkability of the opposites; and cognizes the ethical distinction between right and wrong.

As the knowing self is supersensible, so the supersensible world is matter of knowledge. Its inhabitants "exchange thoughts, reveal to each other their individual feelings and experiences, become interested in each other's histories, exchange reminiscences, aid each other in solving perplexing riddles, form close, undying attachments. This converse is carried on through external and sensible signs, but the beings who carry it on themselves elude sense." As we know that they are, so we know by all the *criteria* of knowledge that God is, and is the personal "cause of all the system of effects which we perceive about us." Most of what remains in theology falls within the realm of related beliefs. These, to be correct, must be formed under right moral conditions, such as supreme love of truth and moral integrity. They are vital to our welfare. As in temporal matters, so in spiritual, "we must live by faith"; or, in refusing so to do, must perish. "Probability is more than the guide of daily life; it is the guide of science and of reason itself."

Knowledge and belief are to a great extent under the control of personal will, and in so far as such is the fact we are morally responsible for them. What we ought to believe in theology and ethics is of primary importance to our well-being. What shall it be? What *can* it be but the common faith of the wise and good, on the assumption that it is supported by adequate proof? This is the only reasonable policy, is the course pursued in relation to many matters of science and art, the truth

of which is not, and under the circumstances cannot be, known until ability, taste, facility, and opportunity combine to enable us to verify alleged truths for ourselves. Any other policy in secular affairs is, by common consent and with unfailing justice, stigmatized as presumptuous and absurd.

Just at this point Bishop Foster enters an eloquently indignant protest against the flippant and irreverent manner in which Christianity is treated by specialists in other fields of research, and whose ignorance of this is no excuse for the supercilious manner in which they speak of it. "Christianity seeks no immunity from the most searching criticism": on the contrary it courts the minutest scrutiny. It does not require faith in the Bible as a divine revelation, except on the strength of the evidence which proves its claim. It urges every man to examine, with most scrupulous care, that evidence for himself. Al it asks is fairness of judgment, supreme love of truth, and fixed resolve to conform the self to the truth, so far as that is ascertained. Then attested ideas or concepts may be transformed into actual experiences, and beliefs into knowledges. With these characteristics and this possibility, the student has the whole system of nature, history, and the Bible, as material out of which to construct his system of theology.

IS THERE ANY SCIENTIFIC EVIDENCE OF THE CREATION OF MATTER?

[Contributed to the Institute.]

By Joseph J. Smith, D.D., Tompkin's Cove, N. Y.

IN the August (1888) issue of CHRISTIAN THOUGHT this question is presented in connection with the origin of man (of the latter part, however, I do not propose to speak at present). Dr. Lewis, in commenting on this question, is reported as saying:

"Science has no means whatever of even instituting an enquiry as to the truth of these biblical statements. And so, on the other hand, those theologians, though they be many and learned, are equally without support in attempting to prove the truth of them" (p. 62).

Now it seems to me that this statement, together with other statements of similar import on the same page, and which are often made by other leading writers, is too broad and too sweeping—that it needs some qualification or limitation. Although we may not hope to see the theory that God brought matter into being "in the beginning," actually proven scientifically on logical grounds, yet to say that science is silent in its support of the doctrine of the creation of matter is, in my mind, to ignore some very important scientific facts that have a direct bearing upon this question. One of these facts, and the only one I propose to offer in this article, is the mechanical character and stability of molecules.

The distinguished Prof. J. Clerk Maxwell, M.A., LL.D., F.R.S.E., whose authority as a scientist will not be questioned by any, and whose scholarly attainments will ever entitle him to a most respectful hearing upon this or any other scientific subject, in his lecture before the British Association, as given in the *Scientific American* and cited in the *Interior* of Sept. 4th, 1873, is thus reported:

"Professor Clerk Maxwell lately delivered an interesting lecture before the British Association upon molecules, by which is meant the subdivision of matter into the greatest possible number of portions, similar to each other. Thus, if a number of molecules of water are combined, they form a mass of water.

Molecules of some compound substances may be subdivided into their component substances. Thus, the molecule of water separates into two molecules of hydrogen and one of oxygen.

"Professor Maxwell has calculated the size and weight of hydrogen molecules, and finds that about two millions of them, placed side by side in a row, would occupy a length of about one twenty-fifth of an inch, and that a package of them, containing a million million million million (1,000,000,000,000,000,000,000,000) of them, would weigh sixty-two grains, or not quite one-eighth of an ounce.

"Each molecule throughout the universe bears impressed on it the stamp of a metric system as distinctly as does the metre of the archives at Paris, or the double royal cubit of the Temple of Karnac.

"No theory of evolution can be formed to account for the similarity of molecules, for evolution necessarily implies change, and the molecule is incapable of growth or decay, of generation or destruction. None of the processes of nature, since the time when nature began, have produced the slightest difference in the properties of any molecule. We are therefore unable to ascribe either the existence of the molecules or the identity of their properties to the operation of any of the causes which we call natural. On the other hand, the exact equality of each molecule to all others of the same kind gives it, as Sir John Herschel has well said, the essential character of a manufactured article, and precludes the idea of its being eternal and self-existent.

"Thus we have been led, along a strictly scientific path, very near to the point at which science must stop. Not that science is debarred from studying the internal mechanism of a molecule which she cannot take to pieces, any more than from investigating an organism which she cannot put together, but in tracing back the history of matter, science is arrested when she assures herself, on the one hand, that the molecule has been made, and on the other that it has not been made by any of the processes we call natural.

"Science is incompetent to reason upon the creation of matter itself out of nothing. We have reached the utmost limit of our thinking faculties when we have admitted that because mat-

ter cannot be eternal and self-existent, it must have been created. It is only when we contemplate, not matter in itself, but the form in which it actually exists, that our mind finds something on which it can lay hold. That matter as such should have certain fundamental properties, that it exist in space and be capable of motion, that its motion should be persistent, and so on, are truths which may, for anything we know, be of the kind which metaphysicians call necessary. We may use our knowledge of such truths for purposes of deduction, but we have no data for speculating as to their origin. But that there should be exactly so much matter and no more in every molecule of hydrogen, is a fact of a very different order. We have here a particular distribution of matter, a collocation, to use the expression of Dr. Chalmers, of things which we have no difficulty in imagining to have been arranged otherwise. The form and dimensions of the orbits of the planets, for instance, are not determined by any law of nature, but depend upon a particular collocation of matter. The same is the case with respect to the size of the earth, from which the standard of what is called the metrical system has been derived. But these astronomical and terrestrial magnitudes are far inferior in scientific importance to that most fundamental of all standards which forms the base of the molecular system. Natural causes, as we know, are at work, which tend to modify, if they do not at length destroy, all the arrangements and dimensions of the earth and the whole solar system. But, though in the course of ages catastrophes have occurred, and may yet occur, in the heavens, though ancient systems may be dissolved and new systems evolved out of their ruins, the molecules out of which these systems are built—the foundation stones of the material universe—remain unbroken and unworn. They continue this day as they were created, perfect in number and measure and weight, and from the ineffaceable characters impressed on them we may learn that those aspirations after accuracy in measurement, truth in statement, and justice in action, which we reckon among our noblest attributes as men, are ours because they are essentially constituents of the image of Him who in the beginning created not only the heav-

ens and the earth, but the materials of which heaven and earth consist." (Discourse on Molecules.)

The conclusion from a scientific standpoint, by one of the greatest all scientists, after the most careful and thorough investigation of the whole subject, is that matter has been created.

Professor Pritchard, who quotes the above for the purpose of re-enforcing his own views, and what he considers to be the true teachings of science, namely, that all things have had a beginning, including even matter itself, very appropriately adds:

"And this is the true outcome of the deepest, the most exact, and the most recent science of our age. A grander utterance has not come from the mind of a philosopher since the days when Newton concluded his 'Principia' by his immortal scholium on the majestic Personality of the Creator and Lord of the Universe." (Address at the Brighton Congress, October, 1874.)

The author of "The Views of the Unseen Universe" is also in entire harmony with the foregoing, as will be seen by the following. Speaking of the creation of matter, the following language occurs:

"This production was, as far as we can judge, a sporadic, or abrupt act, and the substance produced—that is to say, the atoms which form the material of the substratum of the present universe—bears from its uniformity of constitution, all the marks of being a manufactured article." ("The Unseen Universe," p. 155.)

From the foregoing it is plainly seen that science is not so silent or non-committal upon the question of creation as many suppose. While no amount of coaxing and manipulation has succeeded in extorting from science a single utterance in favor of the eternity of matter, it has finally spoken emphatically and distinctly in favor of its creation. It is now seen that each molecule is stamped and branded with the unmistakable seal and signature of its Divine Maker.

Another utterance of science equally significant as favoring the creation of matter is found in the wonderful revelations of matter by the help of the spectroscope; but we have not the time nor space at present to enter this field.

SETS OF "CHRISTIAN THOUGHT" FOR COLLEGES.

IN No. 2 of this volume it was announced that a gentleman had given $500 to furnish full sets of the six volumes of CHRISTIAN THOUGHT to any college that should apply for them. Immediately the offer was accepted. Forty-three colleges were thus supplied, and the Institute has received assurances of great satisfaction from most of the recipients. Then came other applications. To each applicant the following circular was addressed :

"DEAR SIR :—The gift of $500 by a clergyman for putting sets of CHRISTIAN THOUGHT in colleges was exhausted before your letter arrived. I am so solicitous that no application should be fruitless that I have secured the consent of another member of the Institute, a layman, to help in this matter. The price of the set of six volumes, if taken at one time, is $12. He is willing to add $5 to the $7 remitted by any school or college, and so assist in this work. He limits the number thus helped to one hundred. Remit an order, payable to me, and the books shall be sent by express. Your library probably could not procure any addition so valuable at so low a price. It is proper that you give this prompt attention. Very respectfully, CHARLES F. DEEMS, President, 4 Winthrop Place, New York."

We republish this because there may be subscribers to CHRISTIAN THOUGHT who are interested in schools not yet supplied.

MONTHLY MEETINGS.

BY THE SECRETARY.

FEBRUARY, 1890.—The regular monthly meeting was held in the lecture-room of the Young Men's Christian Association, in Twenty-third Street, Monday evening, February 3d, at eight o'clock, the President, Rev. Dr. C. F. Deems, being in the chair. The devotional exercises were led by Rev. Dr. Benj. B. Tyler, of New York. The minutes of the last meeting were read and approved.

The President announced that the next Summer School

would be held at Avon-by-the-Sea, New Jersey, and that the program was nearly completed.

The regular paper of the evening was by Rev. Dr. Amory H. Bradford, of Montclair, N. J., whose subject was "Half-Truths and the Truth; or, Paul on Mars Hall Hill and Browning's Cleon." The paper and subject were discussed by Rev. Dr. B. B. Tyler, Dr. Gouverneur M. Smith, Mr. Philip Myers, Dr. Bradford, and the President.

On motion by Dr. Tyler, seconded by Dr. Smith, it was

Resolved, That the thanks of the Institute be presented to Dr. Bradford for his admirable paper, and that a copy be requested for publication in CHRISTIAN THOUGHT.

MARCH, 1890.—The regular meeting of the Institute was held in the lecture-room of the Young Men's Christian Association, in Twenty-third Street, Monday, March 3d, at 8 P.M., the President being in the chair. The devotional exercises were led by Rev. D. C. Kelley, D.D., of Nashville, Tenn. The minutes of the last meeting were read and approved. The Secretary announced the following names of new members:

Mrs. Helen Hendrix, New Oxford, Pa.; William W. Olssen, D.D., Professor of Greek and Hebrew, St. Stephen's College, Annandale, N. Y.; Rev. John C. Nichols, A.B., Geneva, N. Y.; Thomas Fell, LL.D., Ph.D., President of St. John's College, Annapolis, Md.; Rev. Joseph M. Gelston, Ann Arbor, Mich.; Philip Myers, A.M., New York City; John H. W. Stuckenburg, D.D., Berlin, Germany; Arthur K. Davis, M.A., President Southern Female College, Petersburg, Va.; Gen. Samuel S. Ellsworth, A.M., Penn Yan, N. Y.; Wm. Francis Whitlock, A.M., D.D., Prof. Latin Language and Literature, Wesleyan University, Delaware, Ohio; Rev. James Nilan, A.M., Poughkeepsie, N. Y.; Rev. Jas. Hepburn Hargis, A.B., Germantown, Pa.; George H. Laughlin, A.M., LL.D., F.S.Sc., Prof. Ancient Languages, Garfield University, Wichita, Kansas; Wm. L. C. Hunnicutt, D.D., President Centenary College, Jackson, La.; George Dana Boardman, D.D., LL.D., Philadelphia, Pa.

The regular paper of the evening was by Rev. Dr. C. D. W. Bridgman, of New York City, whose subject was "The Future State in the Old Testament." The paper and subject were dis-

cussed by Rev. Jesse F. Forbes, Mr. Stephen H. Wilder, Rev. Jacob Freshman, and the President. On motion of Rev. Jesse F. Forbes, it was

Resolved, That the thanks of the Institute be presented to Dr. Bridgman for his able and lucid paper, and that a copy be requested for publication in CHRISTIAN THOUGHT.

ABOUT BOOKS.

[In this department we shall make mention of recent publications, especially those in the line of our studies. There will not be space for extended review. The name of the book, its publisher and its price when known, together with a brief statement of its drift, will probably meet the demands of our readers. Any book mentioned will be sent post-paid, on receipt of price, by WILBUR B. KETCHAM, Publisher and Bookseller, 13 Cooper Union, New York.]

American publishing enterprise has received a fresh illustration in the edition of Meyer's great "COMMENTARY ON THE NEW TESTAMENT," published by Messrs. Funk & Wagnalls, 20 Astor Place, New York. It is in eleven large octavo volumes, and in cloth is three dollars per volume. The publishers make an arrangement for an easy payment so that almost any of our young ministers can procure this great work. It has been so long before the public as to be almost universally known, certainly known to all scholars. Dr. H. A. W. Meyer had by nature, by culture, and by grace, remarkable abilities as an exegete. His learning was immense, his spirit broad and non-sectarian, and throughout all his work there is the evident rule of a cultivated conscience. He does not seek to make the Word of God support any special dogma. He industriously examines every part of his subject, and has a remarkable sagacity in ascertaining the interior meaning. Teachers of Bible classes and in Sunday-schools, and young ministers, will find very great help in Meyer in preparing to resist the attacks made on the Sacred Scriptures. No one denying their genuineness and authenticity has arisen in our century with anything like the learning and penetration of Meyer. His candor and fairness have been praised over and over again and again by men of different schools of thought during the last twenty years. Having known the character of the book in its original German, we really feel grateful for this English edition, and heartily recommend it.

In a very pleasant volume, "BETWEEN TWO FLAGS," written by Maud B. Booth and published by Funk & Wagnalls, the reader will find a very pleasing and instructive account of the Salvation Army. It is a movement of such importance as not only to arouse, but to deserve the considerate attention of all thoughtful Christian people. This book may be a good beginning in the study.

CHRISTIAN THOUGHT.

CHRISTIAN PANTHEISM.

[Delivered before the American Institute of Christian Philosophy, July 18th, 1889.]

BY RT. REV. BISHOP FALLOWS, CHICAGO, ILL.

THE term Christian Pantheism may at once raise a question as to propriety in the use of language. Pantheism has a pretty well defined meaning in the philosophical world. In it are combined the ideas of an unconscious beginning of all things and the coming into conscious existence of a being called God, in the consciousness of individual men; that the All is God, and God is the All; that God has no personal existence outside of the personality of men.

Philosophic pantheism confounds immanent finality in nature with the energizing power of God in the activities of a free human soul. It thus denies to finite beings the activity of the individual nature, and affirms all activity to be that of the impersonal absolute cause or substance. It puts, as Dr. Hickok states it, "spontaneity into matter and makes Nature out of it; and then its soul is put into the pure thinking, and the particularity and universality together become absolute, the philosophy cognizing itself and all things as within itself. The real is discarded and its ideal pursued, but all in such a mode that its ideal is as unimaginable as its discarded real."

How can there be a pantheism which can in any sense be called Christian? The designation has been applied to the disciples of Jacob Boehme in Germany and of William Law in England. These men were devout mystics, and some of their followers have not been behind them in devoutness. The union of the human with the divine, or, rather, the divine in His essence

dwelling in the human, has been the cardinal feature of their belief.

Creation in their view is the creation by a personal God of man and nature. Their position as to the ultimate ground of all things is that of the Christian theist. "God is the sole, eternal substance, and all we distinguish as the creation must have been moulded and constituted out of that one substance." "Out of nothing, nothing can come," is taken as the fundamental basis. "That which now exists can only have been formed out of that which existed before." They assert that creation, in the sense of causing other and new existence, is both impossible and contradictory. Changing the form of the expression, it is said, "God cannot convert nothing into something, and cannot bring something out of nothing." Therefore He must create out of Himself. He must impart Himself, or a portion of Himself, in the universe which appears. Hence His essence in some way must be made to enter into the finite universe of matter and of mind.

Christian Pantheism is thus very far removed from Philosophic Pantheism, and has a charm for many minds. Multitudes who have not done much clear and hard thinking, I suspect, are Christian Pantheists in this particular without being aware of it.

A few years ago a work on "The Mystery of Matter and other Essays" was given to the world by J. Allison Picton. In it he discusses the subject of Christian Pantheism. He does not present at any length the different views held of the creation of the universe, but, positing a Supreme Being, he endeavors to show that the essential principles of religious faith are reconcilable with the tendencies of thought in the sphere of positive and physical science. He has no fear of the progress and influence of such science. He accepts the conclusions in their own sphere, of the investigators in its realm. He honors their earnestness and ability. He believes that the results of their studies are in harmony with the essential views of religion. He affirms it to be possible that all forms of finite existence may be reduced to modes of motion. But this is of no consequence in a religious point of view, for motion itself is only "the visible manifestation of the energy of an Infinite Life." "To me," he says, "the doc-

trine of an eternal continuity of development has no terrors; for, believing matter in its ultimate essence to be spiritual, I see in every cosmic revolution a change 'from glory to glory even as by the Spirit of the Lord.' I can look down the uncreated, unbeginning past, without the sickness of bewildered faith. I want no silent, dark eternity in which no world was, for I am a disciple of One who said, 'My Father worketh hitherto.' My sense of eternal order is no longer jarred by the sudden appearance in the universe of a dead inane substance, foreign to God and spiritual beings. And if with a true thought I could stand so high above the world as to take any comprehensive survey of its unceasing evolutions—here a nebula dawning at the silent fiat, 'let there be light'; there the populous globe where the communion of the many with one brings the creature back to the Creator; I am sure that the oneness of the vision so far from degrading would unspeakably elevate my sense of the dignity and blessedness of created beings. I have no temptation therefore to join in cursing the discoverer who tracks the chain of divine forces by which finite consciousness has been brought to take its present form; because I know he can never find more than that, which was in the beginning, and is, and ever shall be, —the Power of an endless life."

Mr. Picton defines the essential nature of religion to be the endeavor after a practical expression of man's relation to the Infinite. This involves the recognition of his profound dependence upon the Infinite as its starting-point. The conscious relation to the Infinite includes every stage in this consciousness, just as the name of a plant includes the blade as well as the fruit. There is in the human consciousness as an indestructible element, an apprehension of something beyond all fragmentary existence—the Absolute Being, at once the only true substance and the One that constitutes a universe from the phenomenal world.

However dim may be this element of the consciousness, it exists. It is inevitable that attempts should be made to give practical expression to this feeling. And in such efforts we find the first germs of religion. The fundamental principle of the Author is in harmony with the teaching, that the mind possesses

necessary truths, which are fundamental and universal, and that by reflection, the Pauline declaration is found to be true, "the invisible things of God are clearly seen, being understood by the things that are made." And thus he agrees with Cudworth, who says, "It is all one to affirm that there are eternal essences of things, and verities necessarily existing, and to say that there is an Infinite Eternal Mind necessarily existing. For, these essences and verities are nothing but modifications of mind or intellect, and therefore, the first intellect is essentially and archetypally such essences and verities."

By Christian Pantheism then, the author means a theory of the world which sees, in all the phenomena of the universe, only the fragmentary and partial manifestation of an ineffable unity beyond them. Nor is this unity merely negative, the abstraction of this or that finite form. It is the unity not of an aggregation but of Absolute Being. Of this unity he maintains we cannot speak with adequate significance. As this unity is the sum of all beauty, goodness and power, he contends we may well use such words as carry our thoughts farthest towards infinite perfection. Our thoughts of personal life, of will, of counsel, and love, and mercy and justice, are the warmest and brightest that we know. It is inevitable, therefore, that in the grandest forms they can assume, they should be transferred to that Absolute Being we call God. Thus Christian Pantheism sees God in every thing. He is the free source, the uncaused cause, and the splendor of all things gathered into unity and expanded to infinite totality.

This thought is in harmony with the definition of personality given by Prof. Bowne, who says, "The personality of the Infinite means that the Infinite has knowledge of itself and its activities, and determines itself accordingly." And this is substantially the definition of personality given by Locke, as quoted by Dr. Hill in his address before this Institute on "The Personality of God."

From all these authors we learn that will is power governed by inner intelligence. Freedom is the power of choosing an end or law, and governing one's self accordingly. The human mind has personality, will and freedom. These all emerge in consciousness; so God possesses Personality, Will and Freedom.

Mr. Picton yet maintains that beyond all this, God is, and *what* He is, we know not. He does not think that Herbert Spencer should be chided for saying that God is the Unknowable, and for the claim which Mr. Spencer makes, that the reconciliation between Science and Religion lies in the recognition on both sides, "that the power which the universe manifests to us is utterly inscrutable." He thinks it hardly fair, that when the Scriptures use words which declare the unsearchable mystery of the divine nature, to rebuke the arrogance of Philosophy, Christians should rebuke Philosophy when it has learned the lesson, and condemn its humility, as wilful blindness.

I have thought in harmony with this sentiment, that the language of the eminent Dr. McCosh may be a little overdrawn, when speaking of Herbert Spencer, he says, "that philosopher leaves us in the unknown, darker than any heathen grove." Is there not at least an advance upon such darkness, when Mr. Spencer speaks of the Unknowable, as "The Infinite and Eternal Energy, from which all things proceed," and as "The Inscrutable Existence, which Science, in the last resort, is compelled to recognize as unreached by its deepest analysis of matter, motion, thought and feeling." And is there not a still further advance when he says, "Though the attributes of Personality, as we know it, cannot be conceived by us, as the attributes of the Unknown Cause of things, yet duty requires us, neither to affirm or deny Personality, but to submit ourselves . . . in the conviction that the choice is not between Personality and something lower than Personality, but between Personality and something higher."

Christian Pantheism as we have seen it unfolded by Mr. Picton does not mean that God is this or that, but that he is All in all. And consequently we cannot and ought not to say, of a mountain, or of a tree, or of the starry heaven, or even of a good man, that this is God. For all of these are only fragmentary phenomenal manifestations of God. The foot cannot say of the hand, "I have no need of thee," but neither foot nor hand can say "I am the man." A wave of the hand, a glance of the eye, may show the individual life; but of neither except in an obviously metaphorical sense can we say "That is the man." So all

creatures of the phenomenal world manifest God; but we have no right to say of any of them "This is God."

The same truth stated differently will perhaps be received more readily. Let it be granted, he says in substance, that generalization carried far enough, brings us to one universal substance, as the true unity, supporting all phenomenal existence. No one would then think of saying of a table, or chair, "This is the universal substance." For what we see is a special form and material which distinguishes these things from others. The unity underlying these divergencies is not seen at first, but becomes manifest on reflection. We then find that the true mode of regarding special objects is to consider them as different manifestations of the universal substance. But they are generalized according to what we do *not* see, that is, their real being.

And we have no right whatever, to give the generalized name to what we do not see, which is not true substance at all, considered in its universality, but only a certain relation between that substance and our faculties under certain conditions. This relative result we may call by the name of wood or iron, table or chair, as the case may be; but it is not true substance; for that is in itself unperceived and imperceptible. If now, instead of the word Substance, we use the phrase Absolute Being, every one would feel at once the absurdity of identifying this with a tree, or a mountain, or a star. So if we believe that God is All in all, it does not in the least follow, that we are to call any phenomenal creature by the name of God, or identify God with any of them, or with the sum of our observations.

Mr. Picton leaves us in doubt whether or not he agrees with the mystics, like Jacob Boehme, William Law and others regarding the doctrine of creation. And yet this doctrine is fundamental to the whole discussion of the question of Christian Pantheism.

Creation is not the coming forth out of absolute nonentity. It is not the rising into existence of something out of nothing. It is not the conversion of nothing into something, as if nothing were the material, or the place, out of which something is brought by the Creator. It is not the conversion of nothing into something, as if nothing were a kind of substance on which infinite power

acted. But creation is causing new and absolutely other existence. The Christian Pantheists or Mystics may say "out of nothing, nothing can come forth." But, as Dr. Young avers, this acknowledged axiom is here glaringly misconceived and misapplied. It is not a *Nonentity* in the past that we conceive of, but an eternal and Almighty Being, the real and deep power, the true cause, the infinite power, on which we plant our faith. And it is not out of God as a substance that the universe comes. This very term substance is apt to mislead, as it seems to convey the idea of a kind of materiality, inseparably connected with it. Not from a substance, but from a Being, the creation has come into existence. Not that a portion of the eternal essence has passed into the universe of matter and mind, and is *subject* to its changes and transformations, but that the Almighty Power, by the act of His will, caused that to be which was not before, is the true conception. That modified Pantheism which teaches that a portion of the eternal substance was converted into something else; that, that which is infinite becomes finite, that, that which is eternal becomes temporal; that, that which is uncreated becomes created; and that all perishing, fallible, finite and sinful beings are therefore, *perforce*, virtually composed and constituted of the divine essence, cannot be allowed. This is not only incomprehensible but impossible. To this truth philosophy must ever hold fast—that an Infinite God created a finite universe. These both exist. They are incomprehensible but not contradictory.

That which is finite must either have been created, or else in its essence or substance must be everlasting and independent. But the eternity of this world-substance would involve us in contradictions, direct and numberless. We are compelled to reach the unity of a true basal monism, and not an ultimate pluralism, just as we are compelled to reach, not the unity of a logical universal, nor an ideal classification of any kind, but of the essential, substantial unity of a Being, who is alone self-existent, and in whom all things have their being, by virtue of His creative and sustaining power.

The universe is the plan and act of God, not a logical implication of the world-substance. As Prof. Bowne holds, "Logi-

cal sequences co-exist with the premises. An eternal world-substance implies its logical consequences in eternal co-existence. This would destroy the unity and unlimited nature of God."

God is not identical with His creation. It is His, not He. It is His thought, His workmanship, not His essence.

But in speaking of the absolute and the relative, are we not speaking of terms which exclude each other? Can God be conceived of as creator, as cause? Does He not therefore become related to the creation? How can the Absolute be related? How can He become as cause to an effect? Is not Sir William Hamilton's position correct, that the law of causation depends upon our inability to conceive creation? It is incomprehensible, all must admit, but is it therefore incredible or inconceivable? I will let Prof. Bowne answer: "God can be conceived of as Creator, as cause, though as Creator He must be related to the creature, or as cause to the effect. For relation in the abstract does not imply dependence. The relation is not necessary or of external origin. The relation is properly posited and maintained by Himself. There is, therefore, nothing in it, incompatible with His independence and absoluteness. This position of the dependent is a self-determination. God is Infinite, but that does not exclude the co-existence of the finite, but it is the self-supporting source of the finite. In calling Him the Absolute, we do not exclude Him from relation but deny only external restriction and determination. Whatever is true, or rational, or real in the universe must be traced to this Being as its source and determining origin."

The Absolute, therefore, though limitless, has intimate and enduring relations with limited natures. He is unrelated to time, for to His existence succession is impossible. He is unrelated to space, for God is not extended and of magnitude, yet He stands vitally related to those who are conditioned by time and space.

We can conceive of the Creator though we cannot of the mode of creation. That is forever impossible for a finite mind to grasp.

But equally impossible is it for the mind to comprehend how

waves of vibrating air can cause the joys of Heaven to be felt in the soul, as the strains of the Hallelujah chorus are heard, though it is possible to conceive of the existence of the soul itself. No mind has ever been able to see the nexus of causation. All that the acutest observation can bring to us is a series of changes. The mind itself supplies the idea of a determining agency.

We must posit the soul or no sound can be heard. However far we may go in our belief in the power of vibrations, and however deep may be the point in the chain of those vibrations, buried in the brain, which we can see only with the imagination's eye, we cannot conceive how molecular action is converted into anything besides material movement or resistance to movement. We cannot conceive how the physical phenomena, inseparable from our consciousness of sight or sound, can be rationally connected with the consciousness which gives them all their interest, producing by their movements the most beautiful visions and sublime emotions of the consciousness itself. Physiological psychology, as Prof. Ladd teaches, may bring us to the contemplation of two beings—the being of the mind and the being of the brain. It may assert that changes in conscious states are invariably connected with changes in the molecular action of the brain, and that changes in the molecular particles of the brain are as invariably connected with the changing states of consciousness. By its thorough examination it may claim to force us to the conclusion that an inevitable dualism here exists.

But where Physiological Psychology ends, Philosophy begins. We can, as we must, admit the reciprocal influence of mind and brain. We may be compelled to admit the dualism which it presents as the only partial explanation that can be given within its realm of investigation. But Philosophy demands, and that is but the demand of the mind itself, that the action of the being of the brain shall be referred to conscious, intelligent being. For being does not simply exist. A thing acquires a title to existence only as by its action it is able to assert itself as a determining factor in reality.

We must, therefore, add to this view of being something else, viz., that of personality to make it really active. That activity the mind possesses. Of this it is conscious. The being of the

brain which is unconscious in and of itself must be grounded in the activity of that which is conscious of its own existence. It is the activity not merely of the Absolute Being, but of the Absolute Person which is the basal fact of the mind's existence. The Infinite and the Finite meet in the dualism of the mind and brain. The Absolute Person is the cause of the existence of the free, human mind. And His constant energy is felt in the action of the human brain. We may say philosophically, what the mere physiological psychologist could not say, that the mind is the agent or the cause of the changes in the molecular particles of the brain, but we could not say that the molecular changes of the brain are the cause in themselves of the changes in consciousness. But we must say in both cases that the ground of the mind's action, and of the action of the brain, is that which makes both forms of action possible, and that is God, the ground of all things. We may term the mind a reality and the brain a reality, as we give them both the name of being, for the only reality is being in a definite mode of activity. From this fact we form the notion of law. But we must go back to the one basal Being in action as the source of the entire system of law and of all principles and realities. God as one "posits the many by His free action. The many have their ground and unity in the will and thought of the one. The basal causality of the universe is one of will and purpose. Thus only is the unity of the Infinite preserved."

There is no action without conscious being. All action must be the action of the Infinite or the action of the Finite. This action must be the action of conscious volition. No other conception is possible. If activity is impersonal, it must become mere sequence, and then the very notion of action ceases to exist.

The Infinite must be immanent in nature. There can be no interaction of powers or things without the immediate and constant working of the Infinite energy.

Force is nothing real. It is but the mind's abstraction from the forms of a thing's activity. Force, therefore, does not inhere in an unintelligent thing. It is not something wrapped up in a seed, to be evolved by the play of other unintelligent things

constituting an environment. These things act by the Power that originates all things, and sustains all things, and not because they have force. But, as they thus act, there comes by reflection to the mind the idea or conception of force.

The notion of Secondary Causes in the realm of unintelligent, non-self-reflecting things, I believe to be as unnecessary as it is unwarranted. It does not afford the slightest help in reaching a just or satisfactory idea of the mode of the Divine working. It introduces dire confusion in thought when we wish to make the fundamental distinction between that which is self-moved, as free finite man, and that which possesses no power of itself to move as non-thinking matter. Nothing is gained to Philosophy, nothing accrues to the reverence of religion by the supposed help. The idea that it vulgarizes the Deity to have His energy of will exerted in every ongoing of nature—the smallest, the meanest, the most trivial, belongs to an unscientific and uncritical age. There is nothing mean, nothing small, nothing trivial in nature. The poet but echoes the teachings and findings of the most advanced scientific investigator.

> Nothing useless is or low;
> Each thing in its turn is best,
> And what seems but idle show
> Strengthens and sustains the rest.

In these two widely separated yet intimately related kingdoms of the material and spiritual, there is, of course, a radical distinction to be drawn as to the nature of the power put forth by the Divine Agency in controlling free, intelligent beings, and in the production of mechanical, chemical and physiological trains of phenomena. Though we cannot put this distinction in words, or even think it clearly, we cannot rid ourselves of the conviction that it does exist.

The doctrine of Final Causes, of design and end, in the creation, is a doctrine perfectly compatible with that of Efficient, Material and Formal causes. It is clearly also the doctrine of foreordination in Nature. Final causes are an absolute necessity for the conception of the unity of the one Eternal Being.

But a free human will meets us in man, as it does not in Nature. The Infinite must gain His ends in the harmonizing of

the human will with His own in a manner altogether different from the way in which He works all things in the realm of matter, according to the counsel of His own will. He gives the power to the human will even when it resists His own lawful claims. But God becomes immanent in the human soul only by its own free, loving consent. And when that is given, true worship is paid Him.

A respect varying in its character is paid to the religious sentiment by the men who refuse its urgent and imperative demands for a Personal God to worship and love. Mr. Huxley, although saying that he would call any man to order on the floor of the British Association for the Advancement of Science who should quote the Bible in support of his position, yet says that worship chiefly of "the silent sort" may be paid by man. But to whom it is to be paid or who there is to catch the unsyllabled breathings of the soul, he does not tell.

He is not here this morning, but I can quote that venerable and never-to-be-superseded Book, the foundation of the Christian Faith, when I voice in its words, which have been echoing through the ages, and going up from countless throngs of worshippers, the deepest and most constant demand of the highest Philosophy. "My heart and my flesh crieth out for the living God."

Mr. Tyndall has eloquently told us that religion cannot be rooted out of the hearts of men, and then leaves us entirely in the dark as to what kind of a religion there must be, with a loving God left out, in a system which derives all things from matter and binds them in an iron chain of necessity. But I still go to that old-fashioned Bible, old and yet ever new, and I exclaim, "Whom have I in Heaven but Thee, and there is none on earth I desire beside Thee. God is the strength of my heart and my portion forever. For Thou hast made all things, and for Thy pleasure they are and were created."

Mr. Spencer may bid us worship the unknowable, and that Divine Word sustains him in part when it says, "Canst thou, by searching, find out God? Canst thou find out the Almighty to perfection? It is higher than Heaven, what canst thou know? It is deeper than Hades, what canst thou do?" But the cry of

Humanity has ever been, "Show us the Father and it sufficeth us." And One has answered, "He that hath seen Me hath seen the Father." And the one who lay in the bosom of the manifested God has told us, God is—not the unknowable—but "God is love. And he that dwelleth in love dwelleth in God."

Philosophic Pantheism cannot satisfy the imperious cravings of the human soul. We must have a God, not a God coming to consciousness in the individual consciousness of man, but a God above and beyond man's grandest conceptions and loftiest ideas —a God absolute, eternal, self-existent. This God, as Herbert Spencer intimates, may be a God possessing higher attributes than those pertaining to our personality. But whatever else He may possess, He must have in His all-comprehending nature that which is highest and best in us. We cannot exalt Him by denying to Him that which, above all else, exalts, dignifies and glorifies man. We love. He loves. We will. He wills. We act. He acts. We are conscious of freedom. He must be beyond all necessity. Our act is intelligent. His cannot be that of a blind, insensate motion. Man works to an end. He does not work purposelessly. Man designs. God has shown in nature the working of a final cause.

Man must come into oneness with the Divine Being. But the union is not an absorption into the great sea of universal Being. The discreteness of the individual soul is forever preserved. The finite still remains the finite. But the will of the finite becomes coincident with the will of the Infinite. By his free, voluntary act man becomes at one with God. Without touching the special theological questions which here naturally arise, I may say that the view of a large number of the profoundest thinkers of the Christian Church help us to a clearer understanding of what may be considered pre-eminently as Christian Pantheism. "God comes forth," as Prof. Wm. T. Harris states, "by His self-determining activity, as the primordial self-determiner (pure activity), from a state of being self-determined (passive), and this coming forth or becoming is a process (which, so far as the Absolute is concerned, has been completed from Eternity), and gives us the Only and the eternally begotten Son, the Word, which was in the beginning, a

Word eternally spoken, but still a Word, *the* Word. And this becoming in another aspect is realized as a finite process, for the Word became flesh and dwelt among us. God and Humanity, in the reality of that Humanity, are identified. The first Principle has eternally reflected itself in him, both self-active and self-object. The One 'eternally become' is thus the image of the Absolute and is Absolute."

Transcending our powers of comprehension, man, through his faith, the voluntary assent of his entire being, becomes one in purpose as he is one in his human nature with the eternally begotten and eternally becoming Son of God. He becomes now a partaker of the Divine Nature. It is not he that lives, but Christ that liveth in him. He is one with Christ in the measureless, fathomless meaning of that oneness, even as Christ is one with the Father.

This is Christian Pantheism. In the beginning, God. In the working of all things, God. In the end, God.

IMMORTALITY IN THE OLD TESTAMENT SCRIPTURES.

[Delivered before the Institute, March 3d, 1890.]

By Charles D. W. Bridgman, D.D., New York.

IT is a strange fact that the human mind has persistently clung to the idea of a future life in spite of the things which tend to discredit it. Amongst the rudest of peoples the hope has been cherished that "life shall live for evermore"; and in the realm of philosophy, though men may confess that they are unable to find any scientific basis for the doctrine of a future existence, they yet feel constrained to admit the possibility of its truth. Whilst they doubt, there is an instinct of nature which disposes them to believe. In a world full of graves, and where the story of each generation is epitomized in an epitaph, men dream of themselves as immortal! Even in the charnel-house of materialism the hope lives as a flickering flame. The doctrine of a future existence is, practically, universal.

And there are several things which pre-dispose the soul to such a belief. Men cling to existence. Their first and strongest desire is *to be*, and it is not enough to be *now;* they want to be *always*. In their highest and best modes men realize that life has a charm of its own. The poet and orator do not ask that they may sing and speak for to-day; they want their strains to flow on, giving comfort and strength to man's heart, and sending an ever fresh impulse into the life of humanity. Artist, artisan, inventor—everyone feels the delight of existence and longs to enjoy it forever. Even rude life feels there would be blessedness in a simply perpetuated existence. The Indian dreams of his hunting-ground only made ampler, and glows at the thought of it. The Northmen look forward to an eternity in the fellowship of the brave. His hope of immortality is the expression of man's love of life.

It is also connected with love. How much of our sharpest, our worst troubles, come through our loves, through the long

partings our hearts must endure, the wasting anxieties, the frustrated longings, the constant menace of pitiless, inescapable death? It is hope that makes the love blessed—the hope of a future; and were man without this, his love would be the bitterest ingredient in the cup of his misery. Love has but one symbol in its language, and that is, forever. At the end of its meditations you find this one sentence: "There is no death." And this belief is still further supported by the fact of the incompleteness of life. The wings of the bird imply a freer life than that in the cage; the leaves folded up in the bud are significant of the longer, sunnier days which shall follow the winter; and the power that is repressed in us, the faculty which cannot be fully unfolded under existing conditions, seems to intimate a released, larger life in the future. Baring-Gould tells us he was talking with a village mechanic, when a few chords were struck on a piano in an adjoining room; the man stopped and listened, and then said in a shaking voice, "I cannot help it; music makes me cry." There was the soul of a musician, perhaps of a genius, enduring the hardships of a lot which allowed it no room to grow and expand into flower. So under their sense of restraint, so with their consciousness of powers which are not allowed to come forth in full exercise, a strong sense of expectancy is developed which makes immortality credible. "My whole nature," said Fichte, "rushes on with irresistible force towards a future and a better state of being"; and he uttered what myriads have felt amid the limitations and disappointments of life.

Now, it would be utterly inexplicable if these voices were not heard in the Old Testament; if we could not find running through it, inspiring and sustaining its heroes and saints, this belief and this hope. If we look for it as a doctrine plainly set forth, like that of God's unity or God's sovereignty, it will not be found. The immortality of the soul is not explicitly taught in the Old Testament Scriptures. Even Dr. Hodge says that "They take the continued existence of the soul for granted rather than explicitly assert it"; whilst Canon Farrar says, "It is indisputable that the earlier books of the Bible contain no clear revelation upon the subject of man's immortality." Still the belief is inti-

mated in one form or another all through the Old Testament. It is implied in the following passages: "And Enoch walked with God, and he was not, for God took him;" "Elijah went up by a whirlwind into Heaven;" "My flesh shall dwell in safety, for Thou wilt not leave my soul in hades, Thou wilt not suffer Thy beloved to see the pit;" "Then shall the dust return to the earth as it was, and the spirit shall return unto God who gave it;" "Thou wilt guide me in Thy counsel, and afterwards wilt take me to glory." It was not a plainly declared doctrine, but a hope, a belief, a conviction; it was stronger in the Jews than in the nations about them, more closely connected with holiness and with God, and it grew more intense and controlling after the Babylonian captivity, because of their sorrows and the glimpses which were given their prophets of the dim future of souls. They, too, loved life; they, too, felt those longings of love which make endless separation impossible; they, too, must have had that sense of grim, incongruous irony which smites us when we think of the seemingly boundless possibilities of affection and reason and virtue being smitten and extinguished forever.

There is one passage, however, which attracts us more strongly than any one we have given, and in which this hope is put forth into its purest expression. "I know," says Job, "that my Redeemer liveth, and He will stand at last over my dust; yea, after my skin, when my body hath thus been destroyed, without my flesh shall I see God; whom I shall see on my side, and mine eyes shall behold, not those of another"—words which are attributed by scholars to the age of Solomon and, therefore, not to be taken as expressive of the less positive, less perfect belief of the patriarchs. The passage is memorable as uttering the hope of a man whose life seemed to have failed, whose possessions had been snatched away, whose integrity was dishonored, but who, stripped and condemned by his friends, still comforted himself with thoughts of the vindication of God. His hope comes forth in this verse into a living, confident faith. It was simply impossible for him to believe that God was really opposed to him, though He seemed to be hostile, or that He never would conclusively vindicate his character. And as he

had lost all hope of it in this world, he felt compelled to look for a vindication ahead. Fading out of this life he anticipated a better. His integrity will be approved; his righteousness will be commended of God; and he himself will then be alive to behold his avenger. This is the line along which his thoughts travelled to the lofty conclusions he reached; this is the spring which threw up that beautiful fountain of hope which still has a charm for our eyes. Now in this or the other texts I have quoted we have the faith which lived in the hearts of the people. They had a sense, because they were men, and because they believed in Jehovah, of a world beyond this, and though the future life occupies no such place in the Jewish theology as it holds in the theology of the Christian Church, it is misleading to say that down to the time of the captivity the Old Testament knows nothing about it. It was always more or less divinely apprehended by the Hebrew leaders and rulers. They could not but have felt the baffling bounds of their life. In their moments of supreme experience they rose into the realm of the invisible and eternal, to the consciousness of those mighty realities which alone satisfy the longings which outreach the limitations of this present existence. Moses could not have lain down to die in the composure he felt had he believed that the next moment would bound all his sorrows, and joys, and expectations forever. The sixteenth and twenty-third Psalms could not have been written by a man who had nothing but a brief mortal life before his mind's eye; nor could the words which the Son of God took upon His lips when He was passing through agony to His triumph, have been uttered by men who believed that man's life differs only in burdens and sadness from that of the beasts that perish. Such men must have believed that death is not final; they must have been persuaded of a conscious future existence; but the doctrine was not emphasized as it was amongst the Egyptians, nor was there any apparent concern about it in the conduct of their lives. It was a hope and belief, a natural hope, a natural belief, quickened, intensified by their personal relations to a personal God, and yet restrained in its expression because of their sense of the immediate presence of God—that He was near them and with them, dwelling in their tabernacle and guid-

ing their way. And this points to the reason why the Jewish records contain so few references to the fact of a future life. It is because they were so absorbed in the sense of a present, personal God, were held so strictly to the duty of serving Him, that they had little interest in speculations as to the far future. Moses would keep their thoughts within the lines of the present. He would educate them to live as God had commanded ; and their obedience needed less of the motives which are derived from contemplating the future, because of their vivid sense of Jehovah as constantly present for judgment or blessing. The Jews, thus, under Moses, are in striking contrast with what we know was the case with the ancient Egyptians. They had always before them the most elaborate and awful apparatus of judgment. What they imagined of the life beyond death was wrought into terrible pictures which were ever before the eyes of the people, and yet their life degenerated with the life of the beast. They became knavish, and wanton, and foul, showing how little a far-away retribution affects conduct when the soul lacks a sense of a present, personal and righteous God. Did not the poets and painters of the Middle Ages vie with the priests in the most harrowing delineations of the horrors of retribution ? Have we not in the frescoes of the Campo Santo in Pisa, and of the Sistine Chapel in Rome a most powerful portrayal of the terrors of judgment? And yet, who that knows anything of the history of those ages does not know that in the very presence of these horrors, pictures by Orcagno and Angelo, artists, and scholars, and priests lived infamous lives? We greatly mistake when we expect that a vivid delineation of the terms of a future retribution will have, in the long run, any controlling influence on the conduct of men. They are not made honest and pure by contemplating the horrors of hell, or the glories of Heaven. These things have their influence in sustaining good lives, but the real root of such lives must be in a holy and an immediate God. The faith of the Jew, therefore, who was trained to "set the Lord always before him," and to make His commandment his absolute guide, was at the opposite pole to the faith of those who live in the future, and assign God to that future, feeling little or nothing of His presence to-day. He stood on a much higher ground

than those Christians who are continually speaking of death as ushering a soul into the presence of God. He had not to wait for the opening of that gate through which every soul passes, before he should stand before God. The present was filled with His presence. It was typified in the cloud in whose shadow he marched, in the lustre in the Holy place on which only the priest dared to look. It was His voice the Jew heard, not in storm only, but in the aspirations and reproaches of his own soul. He was giving him a law, was claiming a service, was asking a love, which he was to yield and obey without respect to its issues in time or eternity. Before the eyes of the Hebrew was God, ever present in the awfulness of His holiness and power, a God ever judging him according to the righteousness of his ways. And it is only when preachers dwell more upon this, and seek to save men for this life without such large reference to the life which is beyond, that they will be in harmony with the method of Divine teaching. What, then, do we find in the Old Testament Scriptures with reference to the future life? We find, as Dr. Hodge says, that it is assumed there, rather than plainly asserted; that the Jews believed in a future state as all people have believed in it; but that, in their case more than in others, it was a definite, a profound expectation, because of their belief in a righteous God. And, if it be asked, why they did not dwell more on the fact of a future existence, the reason is not simply in the dim revelation they had of what is beyond, but because they were being trained to live unto God in the present, to reverence and obey Him in the world of immediate duty. They had to be educated as to the meaning of this life; they had to be taught to serve God because He is God. And the better a man learns this lesson, the better prepared will he be "to possess and to rule the Canaan of his immortality."

ON THE BEAUTY OF NATURE.

[From a paper read before the Victoria Institute.]

By The Right Hon. Edmund Lord Grimthorpe, LL.D., Q.C.F.R.A.S.

BY way of introduction to further reasoning on the subject, I cannot do better than quote the words of Dr. Mozley's sermon on "Nature." He says: "Nature is beautiful by the selfsame materials and laws that it is useful. Take a gorgeous sunset. What is the substance of it? Only a combination of atmospheric laws of light and heat; the same laws by which we live and see and breathe. . . . Who could have told beforehand that these physical laws which fed us, clothed us, gave us breath and motion, the use of our organs, and all the means of life, would also create a picture?" If any one should say that mere habit and custom have produced our admiration of what we call beautiful sunsets, let us substitute another phenomenon of light, so rare that many persons never see one in their lives, and yet so beautiful that those who see it for the first time are amazed at its magnificence, especially if it happens to be such a brilliant specimen as that which appeared here in October, 1870; I mean the aurora borealis.

I do not know that the evolutionists have really made that or any other answer to that argument of Mozley's; and yet that cannot be because they are ignorant of either it or him: he was far too great a writer for that. Moreover, they occasionally show themselves ready enough to swoop down on writers of far less theological celebrity than Mozley, who has been called "the modern Butler," when they see a chance of making capital out of it by exposing some real mistake.

Perhaps you might not unreasonably say to me, "Why need you trouble yourself to prove an undefended case? The Darwins, Spencers, Huxleys, Tyndalls, Hæckels, *et id genus omne*,

have practically confessed the beauty of nature to be too much for them, by leaving it to explain itself, with a few insignificant illustrations about insects and flowers. It will be time enough to reply to them when they have answered Mozley and your former remarks." In one sense that is all true. But leaving alone does not propagate truth. If one side is left to go on preaching its own dogmas and keeping discreet silence about objections which they cannot answer, and if the objectors keep silence too, the objections will be forgotten, or assumed to have been silenced, though nobody undertakes to say how, or when, or by whom. Therefore, in short, it does not answer to abstain from repeating the objections to bad theories merely because the theorists abstain from noticing them, as most of this class of theorists do when it suits them; or coolly say that their theory is getting universally accepted.

I have not only looked at the most likely books, but I have asked greater readers than myself, including some with an inclination rather against than in favor of my views, whether they could tell me of any automatic theory of general beauty beyond those oft-repeated ones about flowers and animals, and I have asked in vain.

Let us consider then some specimens—for they can only be specimens—out of an innumerable multitude of natural beauties, which it is impossible to account for by any theory except the simple one that they were designed by some mind which had also the power to produce them, whatever means it worked by. We may be quite ignorant of the means, but quite certain that some means were intelligently used: as certain as we are that the most inexplicable conjuring-tricks are contrived by more intelligence in that matter than we possess ourselves; indeed, the less we can guess at the means of performing them the more we think of the cleverness of their inventors. The only answer that I have ever been able to obtain privately to questions of this kind is the one I alluded to before, and which is worth further notice because the person who gave it me was as capable as any in the world of giving the best answer that any such question admits of, being one of the most eminent philosophical writers of the age, and not a mere inventor of phrases intended

to pass for philosophy with half-educated people who pronounce them "greater than Newton," and their periodicals print such rubbish for them. Probably they could not answer a single question out of Newton in an examination. The answer I got was this: that beauty is merely a question of habit and fashion, and that there is no such thing as absolute beauty, and therefore nature has done nothing for it. That is only another specimen of the common fallacy of that school in these matters, of generalizing from a very small or special set of instances, which is directly contrary to the great law of scientific induction. We can afford to admit that our ideas of artificial beauty, such as we try to make for ourselves, are very much matters of transitory fashion, though even that requires some qualification. I need only utter the word "dress," to bring to your minds the very idea of mutability rather than of beauty; and you will need no reminder that we are considering the beauty of nature, and that dress is not natural. Nor is any artificial adornment of the person, or the cultivation of any particular kind of figure, in which one nation, or the people of one age, may admire just the contrary of another, and call that a beauty which some other nation pronounces a monstrosity.

But, setting aside mere dress as an ornament, in which change (with some regard to use and convenience) has long been regarded more than abstract beauty in all the modern nations, I do not think it is true that the taste of civilized nations about the cultivation of what is comprehensively called figure has materially varied in any known period, and still less about beauty of face, which admits less of artificial cultivation. We need not consider purely barbarian tastes, which sometimes extend to absolute mutilation, as of Chinese ladies' feet, and the production of hideous deformities of face and figure by still more barbarous and unprogressive nations.

Most young men and women now would accept it as the highest compliment to be told that they resemble some famous Greek or Roman bust in face, and even in their hair, of which the style for women is necessarily, in some degree, artificial, and therefore variable. If some of the old Roman hair-dressing is not copied by modern ladies and their "artists" in that line, it

is certainly not because it is not beautiful, but either from ignorance how to do it, or from the vile modern habit of allowing French *hetairæ* to invent their fashions, and perhaps from a bold desire of advanced female thinkers to display their contempt for St. Paul's and other antiquated prejudices in favor of long hair over "touzled fringes," or an imitation of boys, or some of the other ugly vagaries which come into fashion for a little while and then die out and never revive; which is probably the best test to apply to any doubtful fashion as a matter of real beauty.

The same cannot be said of the constant admiration of what has always been understood by the common phrase, "a good figure," or "a fine shape," as it used to be called in the novels of the last century, and its consequent cultivation by various exercises and still more artificial means. Those who have occasionally seen the controversial articles and letters in sundry periodicals in favor and in derision of the Rational Dress-Reformers (we must take care to put the hyphen in the right place) will have read, or may know independently, that the very same kind of epithets and descriptions were applied to the figures of female beauties and their cultivation by the oldest Greek and Roman poets and other writers, and by the mediæval and later ones, and by satirists and philosophers of the "rational dress" order, for nearly one thousand years up to the present day, and that the fashions they denounce have only varied in intensity from time to time. Notwithstanding such variations, and in spite of both satirists and philosophers in all ages, I suppose one could not find in all literature any admiration expressed of what everybody now understands by the common phrase "a bad figure." It matters nothing for this purpose whether those who denounce or those who advocate artificial means of improving it are right. Some of the strongest denouncers avow themselves admirers of the very same result when they believe it to be natural; and others lament that their scolding produces no effect beyond apparently intensifying the fashion they revile by evoking contradictions said to be grounded on experience as to health, however contrary to theory and *à priori* probabilities.

All this goes to prove that there has been no material variation in the estimate of beauty of either face or figure in the civil-

ized nations of the world in any known period, and that when people talk of the proverbial mutability of taste and fashion, it really means taste and fashion in purely artificial things, like dress and furniture, and not in those which are chiefly made for us by nature; and it is the beauty of nature that we are talking of throughout.

Therefore it is hardly necessary to consider also the variety of tastes in building, which again is purely artificial. Yet even in that we may trace more uniformity in taste in the long run than some people imagine. It does not follow that because only one style used generally to be in fashion in one age and nation, all those old ones are not more or less beautiful. Most likely all the styles which are possible within the laws of mechanics and geometry have been exhausted, except mere monstrosities. And what is the consequence? Why, that we now recognize the beauty of them all, and do our best to imitate them, some persons preferring one and some another, either for different purposes or the same. A man would now be thought a fool who built a dwelling-house to imitate a Greek temple, as they did in all the Georgian period; and yet an equal fool to pronounce Greek temples ugly. Two centuries ago, and less, writers who knew no better wrote of all the great mediæval styles, which are collectively called Gothic, as "obsolete" and "modern" and contemptible, just because the renaissance of the classical styles was then in fashion. But the natural instincts of mankind returned upon them, and before the end of the last century they began to see that mere ignorance had led those writers to condemn what they only did not understand. Moreover, religious prejudices had much to do with it. In all northern Europe, though not in Italy, where the classic St. Peter's had been built with the "indulgences" which caused the Reformation, the style of the old abbeys was associated with Popery against Protestantism. By degrees that delusion vanished, and then people began to see that both the great styles of architecture have peculiar beauties of their own, against which all that can be said is that they refuse to mix. At least, all the attempts of architects a few years ago to make an eclectic style out of classical and Gothic were miserable failures, though all the five Gothic styles

mix well enough, as nearly every cathedral tells us. It is much like the case of animals which will not breed outside of their own species, but will freely within it.

I have said more than I need to answer the only attempt that I have ever been able to meet with from any of the deniers of design in nature to account for the enormous preponderance of beauty over ugliness that prevails throughout nature, and even in things that are partly, if not wholly, artificial. It is plain that there are permanent or continually reviving instinctive tastes for beauty, which no argument can prove to be either right or wrong, but no temporary craze of fashion can get rid of or prevent from returning. Moreover, some of our tastes for beauty may be called latent, and ready to start into action whenever the proper object is presented to them by some law of nature which has never before had the opportunity of acting, so far as we can tell, but does act, the moment it is wanted, as promptly as gravity, which never sleeps, as the old saying is. I have already mentioned the aurora borealis as a perfectly new phenomenon to many people, and indeed always new the first time they see it, and much too rare to admit of the explanation that admiration of it is an inherited taste.

Another not so grand, but a still newer phenomenon is the beautiful colored spectra of electrical discharges through a tube almost vacuous, or filled with certain rare gases. Nobody in the world had seen that, or anything at all like it, until it appeared of itself as soon as the requisite conditions took place a few years ago; and yet nobody in the world would pronounce it anything but beautiful. So are many of the phenomena of polarized light, which are also quite modern, and are yet as unknown to the common run of men as those electrical discharges are. Not only those occasional exhibitions, but some constant ones, are equally surprises to those who see them for the first time, and had never been seen by the civilized world till quite lately. Such are, or rather were, those magnificent terraces in New Zealand, which were destroyed by an earthquake almost as soon as they had been introduced to general notice by Mr. Froude's "Oceana." In short, if the theory of beauty being only what we have learnt by long habit to think so were true, we should

admire nothing that is very different from what we are used to. Some people indeed are stupid enough to think *à priori* that they never will; but very few indeed are so stupid as to withhold their admiration when they see a really beautiful object, entirely different from anything they have seen or imagined before. It is old tastes that are depraved by fashion and prejudices, not new ones; and the power of appreciating any real beauty that we have never seen before is latent and as ready to start into action the moment a proper object is presented to it as a needle is to jump up to a magnet, though it may never have been within miles of one before, and to turn towards a particular spot on the earth, thousands of miles away, the moment it has been stroked with a magnet and set free.

The same remarks apply to an infinite number of non-living objects which the most audacious theory-monger cannot pretend to have been modified by any non-creative agency. Such are natural water in all its forms—stormy or still seas, in sunshine and under clouds, waterfalls, rivers, brooks and lakes in the bottom of a valley, and the valley itself; mountains and hills, and all the green things upon earth; dews and frosts, ice and snow, and what are called frost-ferns on glass windows; "iridescent films" of very thin plates; polished marbles and fine woods, of which the beauty is latent till it is so brought out, and then it appears in endless variety.

And how came that endless variety? It is hard enough for us to invent a little that is beautiful every now and then, and very seldom without some great defect or mistake. What we call Nature makes no mistakes, and yet is always producing novelties, and never by any accident repeats anything exactly. It is idle, and for scientific men absurd, to talk about chance doing these things, for science knows that there is no such thing; and the more it talks about the immutable uniformity of laws of nature, the more it declares that what we call chance is only the result of some of those very laws, of which perhaps we know nothing. Set the cleverest artist to draw a thousand of the most varied patterns he can of the leaves of any tree, or indeed of any other thing, and you will soon be sick of their monotony. Yet his, according to the "persistent force" and evolutionary

philosophers, is the highest intelligence in the universe, and "nature's" artistic work is only the result of laws of absolute uniformity. Which *ought to be* the most full of variety and "life" on their theory? And which is?

I might logically stop here, and say to the evolutionist, "Your theory, your only theory, that pretends to explain the beauty of nature by explaining it away and calling it conventional, is done for, even if you had far more evidence than you have of natural selection, or any of your other inventions, to account for the beauty of living or reproducing objects." For, after all the complicated and portentous definitions of natural life, I think a capacity for reproduction is practically the best, though we can easily imagine once-produced creatures that might exhibit all the usual phenomena of life except that, and except mortality too, theoretically. I mean generically, not individually—such as mules, or other barren individuals of a species.

But I will not shrink from facing the automatic philosophers on the ground where they are a little stronger than they are with reference to non-living objects, and from inquiring how far their selection and survival theories can carry them towards accounting for the immense preponderance of beauty over ugliness in the world. One very large and immeasurable class of living objects—viz., trees of all kinds—we may sweep off at once with the remark that the evolutionists do not even pretend to have invented any theory to explain why all trees should not be as ugly as toadstools. And we must add that it is by no means an even chance whether things should be ugly or beautiful, though those are as opposite words as yes and no, or black and white. For everybody who has ever tried to produce anything beautiful, even in his own opinion, or has watched the attempts of other people, knows how difficult it is, and that there can be no greater delusion than to fancy that you can produce beauty by merely making something opposite in all its features to something else which you know to be ugly. The useful or the strong can be produced by scientific invention and adequate knowledge of the laws of nature. No knowledge and no rules of science or art have ever been able to produce the beautiful, if they are able to keep designers from very gross defects or blunders.

If that is so, it follows that even if beauty did not so vastly preponderate over ugliness in nature, yet any considerable quantity of it would be a phenomenon requiring explanation. No talking about the laws of chance would do anything for it, even if chance can be admitted as a scientific cause of any phenomenon. The once-popular toy called the kaleidoscope, which was invented by Sir David Brewster, a great optical philosopher, presents an infinite number of pretty figures as you turn it round, which are made only by a good many colored bits of glass or stones tumbled about promiscuously, and so you might call them all beautiful pictures produced by chance. But until design and contrivance were brought in, and the machine made what it was by a pair of reflecting glasses set at the proper angle, there was no beauty at all. It was the glasses that produced the pretty radiating and symmetrical figures out of each confused little heap formed by chance. Chance very seldom produces beauty without the intervention of something that lifts the arrangement above that of chance. Mere heaps of stones which have been broken and thrown together by some natural convulsion have no beauty; as, for instance, at Ilkley, in Wharfedale. That is just the converse or opposite of the composition of stones and marbles and crystals and vegetables, by what we may call the constructive laws of nature as opposed to destruction. The former almost always produce beauty; the latter very seldom do.

In like manner decaying substances are generally ugly and nasty, until some reconstructive process has set in which is going to produce new life. I know that the living creatures which are often the first products of decay are generally nasty enough looking things too, and so are some of the fungi, but they never last long. Moreover, I by no means say that beauty is universal, even among things which have ample merits of their own, such as oysters, to whom unknown ages of natural selection and admiration by man have been unable to impart anything that their greatest admirers can call beauty externally. What I do say is that the enormous quantity of natural beauty in the world is wholly inexplicable by any theory except that of a designing power, able first to design what is beautiful (which

we can very seldom and very little), and then able to produce it in such profusion that it looks spontaneous, and far more natural than ugliness, because it is so common, and in quite infinite variety.

I have said all that I need about the universal beauty and unlimited variety in trees of all kinds, for which the evolutionists have never yet pretended to invent an explanation. And I have said all that need be said of colored flowers. If anybody likes to consider the insect theory sufficient to account for them, let him. They are so small a portion of creation that they are not worth arguing about. If that theory is right, and adequate to account for the infinity of beautiful shapes as well as colors in flowers, it wants another theory to explain how the insectal taste for floral beauty came to agree so well with human. Perhaps we and the flies had a common ancestor, and inherit our taste for beauty from him, whoever he may have been. Nor is the insectal theory much helped by the fact that bees of all kinds cultivate flowers of a multitude of kinds and colors, including some with the very minimum of color, such as mignonette, and have not yet been able to impart any more of it to them. If it is said that the insects are attracted by nice smells, I reply that the vast preponderance of nice smells over nasty ones in nature, and of nasty smells over nice ones in art, is an additional difficulty for the automatic creationists.

Leaving that small section of creation then, with that small attempt of the evolutionists to account for it on automatic principles, I will say a few words on another kind of life, for the usual beauty of which their explanation is more plausible, but yet very far from sufficient—viz., that of animals. The effects of judicious selection in breeding are undeniable when that selection is made by some agent with adequate intelligence and experience. And so we can breed new varieties of flowers and improve fruits, whether insects do or not, beyond what is ordained for them by their instincts or their experience, which depends upon the laws of their creation. So it is not unnatural to conclude, but it is very difficult to prove, that animals select their mates according to their beauty. According to their strength, there is evidence enough that they do, and in fact

must, whenever there is a superfluity in whichever is the stronger sex (which is not quite always the male sex). And, so far as strength and beauty go together, the result will be that the beauties get the best of it. Very likely also, the beauties of the weaker sex, on the whole, get the best of it. But they do so less than one would expect, even among the human animals, in which we recognize far greater differences of beauty than we do among beasts and birds. Indeed, so little does this prevail that it is very difficult to say that it has improved the beauty of mankind in any known period. It is true that civilized men and women are, on the average, much handsomer than savages; but it is a great deal too uncertain that the civilized and handsome races have risen from savages, and ugly ones, to build any conclusion on that as a fact. All our experience is that savages die out when they come in contact with the superior races; and, I believe, absolutely none that they improve. The experience of all the known history of mankind, including the supposed oldest skeletons, exhibits very much less than one would expect in the way of improvement in beauty by natural selection or survival of the best, seeing how quickly careful breeding does produce its effects in animals. In some respects there is no longer any doubt that both we and the French have reached and passed our climax physically, and I suspect, intellectually too; for learning is not genius, which is becoming rarer in every direction. Yet our circumstances, and condition, and means of cultivating beauty had certainly increased, until a few years ago, at any rate, before universal poverty set in among the classes most likely to do the best for themselves in breeding.

This absence of evidence of general improvement in human beauty within the longest known period is still more awkward, because men are evidently more likely than beasts to avail themselves of opportunities for judicious selection. And again I say of them, as of the flower theory, that if the evidence were a hundred times better than it is, it would do absoluely nothing towards accounting for the infinity of beauty of everything with no life as high as that of locomotive animals; for locomotion is evidently a necessary element in selection, and some low animals are not locomotive. Another awkward fact is that the beasts

most like us are, nevertheless, by general consent the ugliest. If, on the other hand, it is contended that apes have a standard of beauty of their own, and choose their mates accordingly, as savages probably have, then it follows that we must dismiss all animals from this discussion, and of course insects with them, and treat each species as having its own taste. And then I am afraid we shall be driven to ask how it is that an undoubted majority of every nation with our known taste is rather ugly than handsome? In any case it is an odd result of the theory of improvement by natural selection, that our nearest neighbors, the apes, and ourselves present the largest proportion of ugliness of any known creatures above the rank of oysters. A few kinds of dogs, who rank about with monkeys in intelligence, are certainly ugly enough too; and elephants, who make the third family of the most knowing beasts, can hardly be called beautiful. On the other hand, what product of life is as beautiful as many shells? A collection of them, such as Dr. Percy has, is quite amazing for its beauty and variety. How does any evolutionary or selection theory profess to account for them? Or do you suppose that oysters occasionally make pearls for their own private contemplation or ornament? Or that even peacocks know how to make the spines of their feathers grow so as to compose "eyes"?

So it seems we are driven to these odd-looking conclusions: 1. Though the human race in its best form is the most perfect and beautiful of all animals (though not if we take the gorgeous colors of some birds into account), nevertheless the great majority of human individuals must be called ugly, and vastly inferior in beauty to many of the commonest and smallest, and almost the lowest creatures, who must be very superior to us in good taste if we are to judge either from their productions or their progeny, which, we are told, is the result of their selection in breeding; and therefore that theory of beauty breaks down in the very place where it ought to be the strongest and the most successful.

2. When we get below locomotive life, the only attempt to account for any vegetable beauty—viz., that of flowers—is so inadequately supported, and goes such a little way in accounting for their whole beauty, that it is worth nothing as a general

theory; leaving beautiful but stinking poppies, and tulips which have no smell, and almost colorless but very sweet mignonette, to reconcile themselves as they can, and also to explain as they can what primarily made the connection which does exist between insects and flowers.

3. Beyond that very limited attempt to account for floral beauty, the evolutionists have absolutely nothing to say for trees, and *à fortiori* nothing for inanimate nature.

4. Our general impotence in producing beauty, even to please our own taste, is a no less striking fact when we are considering how its prevalence in the world is to be explained.

Is it necessary to draw any further inference from these facts? Or can there be any inference but one as to the prime cause of all the beauty of the universe? Beauty differs from usefulness or necessity in this obvious way: If the world was to exist at all it must contain all the necessary adaptations; though it is still true that that would not make one of them. As I said elsewhere, the fact that children cannot be reared without milk would not produce either milk or children. Living creatures must either be immortal, or must cease, or be reproductive; but that would not take them a single step toward reproduction, or perform the seeming miracle and the yet inexplicable mystery involved in it; for its universality leaves it no less wonderful than the first time it happened.

But these things must have been done somehow, if there was to be a living world at all. Beauty need not. It is altogether a gratuitous exhibition of perfection. Look at the hideous things we make for all purposes, and continually more and more hideous as we advance in science. Why does not nature make its necessary works hideous, too? Why are teeth, and eyes, and hair, and feathers, more beautiful than coffee-mills, and telescopes, and ropes, and the paddles of steam-boats, or than our own bones and entrails or body without skin? A single blotch on a face ruins its beauty. How came most young faces to have the beautifully-arranged colors that belong to them in health? Except the arts of painting, sculpture, and building for a few centuries, we can hardly make anything that gives us lasting pleasure, even to ourselves, and except when we call in

nature to help us, which is always ready, as when we "make" gardens, as we say—though we do not really make them, but only invite nature in a certain way. Where then is the real factory from which all this infinity of never-failing and never-blundering art is being continually turned out, and who is the artist that invents it all? When the Spencers and Huxleys, and their fraternity, have tried their answers to these questions (which they never do), we may consider whether our side of the case needs arguing further. At present it does not. The factory of the beauty of the world is not chance, for chance is infinitely against it. It is not ourselves, for it is all prior to ourselves, and we can make hardly any when we try. It is some person with evidently unlimited mental resources and power to make every atom behave as he chooses, both for use and beauty.

People who call themselves "thinkers" write sententious and pretentious nonsense about the impossibility of mind influencing matter, merely because they do not know the *modus operandi*. But something or other has influenced matter to make it assume beautiful forms, chiefly for our delight, as far as we can see, and very likely to show us how vastly inferior our own conceptions of perfection are to those of the divine mind. For if this is not to be called mind, what is it? If any one is prepared to argue that self-existing force in no particular direction has resolved itself spontaneously into an endless variety of beauty-making forces as well as others, let him begin and show us how he thinks the first step was taken without the aid of anything that can be called a mind, or a designing power intending to produce the results that are apparent everywhere. The anti-creationists take care never to attempt anything of the kind, and therefore they cut their own throats as inventors of a cosmogony.

I have only one more point to deal with, very shortly. These people may ask us how we account for such a designing power as we assert to be the only possible producer of all the beauty of the world leaving anything ugly. The proper answer is that we cannot tell, beyond this: He has Himself told us that He did not mean to make this world perfect, either morally or physically. He has not told us why, and all the guessing in the world will never be any more than guessing, quite incapable of proof. It

is only another guess, that an omnipotent Creator would not make an imperfect world, to be hereafter changed into a perfect one, and a guess worth nothing in the face of all the facts, including this—which the evolutionists themselves insist on more than anybody—that the world has, on the whole, improved immensely. The dictum that an omnipotent Creator would have made it perfect at once means nothing more than that we think we should if we had had the making of the world, and that we do not know the reasons why it has been made otherwise. But, as a matter of fact, it has, and with an amount of contrivance which is still quite beyond our understanding in many essential points, even in the fundamental constitution of all matter and in the nature of the primary forces of gravity, electricity, heat, and nearly every physiological operation of nature.

Of those in general I have not been speaking in this paper, but only of the special laws and forces of nature which in some quite unknown way produce the unnecessary but delightful results that we call beauty. We are ready to attend to any theory of creation which professes to account for *all* of it. Theories to account for little bits alone are not worth attending to in any science, and, *à fortiori*, not in the science of cosmogony. Our theory accounts for it all; and therefore by all scientific rules it is good until it can be supplanted by a better, of which there is no system yet. And therefore it is scientifically indisputable, that beauty, like "every good gift and every perfect gift, is from above, and cometh down from the Father of lights, with whom is no variableness nor shadow of turning."

MONKEY ANCESTRY.

[Contributed to the American Institute of Christian Philosophy.]

By R. A. Abbey, D.D., Yazoo City, Miss.

WHY this is uniformly denied by debaters I do not know; I think it would be far better to subject it to demurrer. It is certainly conceivable, and a trial upon the issue of fact may not be necessary. There are but two things conceivable that can be meant by this hypothesis; these are:

First, away somewhere in the past a full-blood female monkey gave birth to a full-blood man child, and about the same time the same or another gave birth to a full-blood female child. And so humanity began. But our skeptical friends would not allow this. Why not? Because, they say, it has no analogy in nature. Nothing similar was ever known. Nature everywhere testifies against it. Thus it seems that a hypothesis of human origin to be received must find support in similarity in nature's operations elsewhere around us.

Then, secondly, this must be the meaning. Away in the past, some one monkey family, or perhaps more than one, began by slow degrees, more or less slow and gradual, to secede from the great monkey kingdom, and take on, generation after generation, human characteristics and lose more and more those of the monkey. And this continued change brings us to man's present estate.

It is very certain that only one family or one portion of the entire monkey race was engaged in this manhood enterprise, for the posterity of all the rest is here now in all the wildness and brutehood of the other brutes of the forest. This seceding or switching off from the main monkey race, and thus bringing into being a new and therefore unknown race of animals, is certainly conceivable, and I know of no grounds upon which it can be positively denied, however improbable it may seem.

But before it can arise above a hypothesis and claim to be a theory, and before inquiring into the truth of it, several questions must be answered, not to the entire satisfaction of anybody, but so as to be somewhat plausible and answer to nature.

First, was it ever known that any one animal race left its natural line of descent for the purpose of producing a posterity essentially different from itself? Improvement or development to any extent is readily seen, but this is not a case of that sort. Here was no improvement on monkeyhood as it then existed or as it now exists. So far as all brutehood was concerned, there was everything to lose and nothing possible to gain by the introduction of this new race. The outlook was loss and injury even to ultimate ruin. What has the monkey or any other brute race gained by it? He has raised up a most relentless, and I might as well say inhuman, and tyrannical master, claiming and exercising absolute dominion, not only over the world which he usurped, but over every inhabitant thereof. This one monkey race or family, with most suicidal intent or no intent, has raised up a race of animals to slay and eat and harness into perpetual and hopeless slavery every denizen of earth. Before this the world was doing well, far better than now so far as all brutehood is concerned. Such a world-wide calamity was never before or since. And the outlook is as hopeless as it is gloomy for all brutehood.

This point needs explanation. I do not say it cannot be explained. I say only that in my reading I have not seen an explanation attempted.

Secondly, naturalists show us that different species and different varieties may grow out of any given germs of the animal races, but I have not known it to be held or taught that a given genus could produce a wholly different genus, or that there is precedent for such belief. This needs explanation.

Third, animals of the same genus or species or variety, living in the same country or vicinity, are liable to cross or intermix. But here this man-making tribe of monkeys kept separate from all others for many, perhaps hundreds or thousands of generations, and no intermixture with others. It is obvious that a very slight intermixture would frustrate, if not ruin the scheme.

Fourth, not questioning whether true or not, the general doctrine of improvement, development, evolution, arising in the scale of animal life, the great degeneracy this one monkey tribe or tribes has suffered in this man-producing process is not accounted for. It has lost on an average at least one-half—indeed, more—of its entire physical constitution. Compare man and monkey now as to agility, muscular strength, power of endurance, fatigue, gestation, birth, care of young, or anything else that is physical, and our degeneracy is fearful and unaccounted for.

Fifth, the two and the only great animal powers are Instinct and Reason. Without the former the entire brute races, monkey and all, would soon become extinct. And so of man; deprive him of reason and he would not see the next generation. Man is as unfitted to use instinct as brutes are incapable of using reason. The two things have nothing in common. They are as independent of each other as either is independent of muscular action. Reason can no more grow into instinct, or *vice versa*, than either can grow into vision or any other sense.

When this monkey race began to secede from its kin, as we are told, Reason or Intellect did not exist in the world, nor was there the slightest conceivable need or use for it. Brutes had no more use for it then than now.

Now, a very important question is, how did this race of non-reasoning brutes acquire reason and so impart it to their posterity? Who invented it? How came it here? As before stated, it was ruin to the inhabitants of the world as the world then was. It has enslaved the world to a merciless tyrant, and a brute family produced it! And stranger still, if possible, while he was acquiring reason he lost his own great power of Instinct. How could he lose it? Is there any analogy in nature for any part of this wonderful acquisition and such unaccountable loss?

It might be said, though it is impossible anyone could know it, that the acquisition of reason was more than an equivalent for the loss of instinct. Maybe so. But who conducted the negotiation? And who were the parties to it? Man was not a party, for he did not then exist. And if it was and was known

to be a good bargain he was making, who and what guardian friend thus interposed in his behalf? This certainly needs explanation.

Hitherto I have made no argument about anything. I have affirmed nothing, denied nothing, but have been merely looking at the hypothesis of monkey origin as it is presented to us. I say hypothesis, for it cannot be considered a theory until some reasonable explanation be given of the few points in it above enumerated. Let this be done and then, but certainly not till then, can it be offered to us, upon any rule of reasoning, as a theory to be inquired into.

I do not say these explanations cannot be made, for I am but poorly versed in final possibilities. I say only that they have not been made, or even attempted, so far as I know. But let it be admitted that these five suggestions are not only susceptible of being cleared up, but have been cleared up on reasonable principles of natural science; how will the case then stand as between the skeptical scientist and his Christian friend? This is really the vital point.

Then and in that case the question is easily answered. In all frankness and magnanimity the Christian will reply, We are greatly indebted to you for telling us a thing we did not know before. If those things are true, then you have informed us how God made man. This we did not know. Our Bible is totally silent on that question. It tells us very plainly that God made him, but not a word as to any mode, manner, process or way in which it was done. It is true it could not be very important that we should know how God did this particular thing, since we have no conception as to His mode or method of doing anything. Still, most of us have a great deal of curiosity, and if you can make these facts hold water, as the lawyers say, we will acknowledge a lasting obligation. Monkey origin is one of forty conceivable modes of human origin, and if any one of them can be freed from such natural entanglements as are suggested above, it will be entitled to rank as a theory to be inquired into. Otherwise it must rate as a conjecture or hypothesis at most. Theory must find support in nature.

An intelligent Christian, with his Bible before him, acknowl-

edges that something substantial stood antecedently and primordially related to man. To inquire, in the study of anthropology, what that something was, would be to inquire what man was before he was. And, then, chemistry informs us that matter has no identity. So the Christian, as such, has no interest whatever in any inquiry touching this antecedence. The question is purely and exclusively scientific.

It results, therefore, that all these debates touching a divine agency in man's production relate to the *how* and not to the *whether*. Whether God made man or not is a vitally important question in the science of theology as well as the other sciences. The question *how* He did it is a fool's inquiry about nothing.

HUMAN ABILITY.

[Contributed to the Institute.]

By Rev. George Shipman Payson, New York.

THE old-time distinction between natural and moral ability is sufficiently familiar, but for the purposes of this discussion it may be well to repeat it. By natural ability is meant an ability to do a certain thing which belongs to the nature of man; or, in other words, a native faculty, endowment, or capacity to do that thing. With reference to the law of God it is admitted by all classes of theologians that the natural ability to obey it is possessed universally; that, as far as endowment or capacity is concerned, every man, whether regenerate or unregenerate, is able to yield obedience to that law if only he is inclined.

But the inclination of "the natural man," as the Scriptures employ that phrase, is opposed to the divine law, and to describe that inclination or tendency the term moral inability has been employed. It refers to a state of the will. It should be used exclusively of a state or condition of the will, not, in any case whatever, of an act of the will or a volition. This distinction has not always been as carefully observed as it should have been in the interests of exact theology; but, sometimes with and sometimes without it, a certain class of theologians has affirmed that in the unregenerate state the human faculties, although

capable of yielding obedience to the law of God, are so disinclined to do this that their condition can best be described by the phrase "moral inability." A will-not is a real cannot. A man is unable to do that towards which he has no inclination whatever, and away from which he is inclined by all the force of heredity, life-long habits, and consequent bondage of will. His native capacity or endowments are all that are necessary for the performance of the act in question, but the trend or tendency of his character is against his attempting to do that which is righteous, and, therefore, he is said to be morally incapable of a righteous act.

This state of the human will is variously described in Scripture under the figures of deafness, blindness, weakness, enmity, and death. And the opposite state or condition of the will, into which the soul is translated by the first act of salvation, is variously described under the figures of restoration to hearing, restoration to sight, or strength, or friendship, and under the still stronger and more impressive figures of regeneration, resurrection, and even of creation. Whatever may be said of the others, these three figures of creation, regeneration, and resurrection certainly imply a dependence upon Divine Power which, in one form or another, is freely conceded by all classes of theologians. As far as these figures teach anything, they plainly teach that, without the interposition of God, no soul can possibly be saved from sin. It may not be right to push the analogy suggested by either of them so far as to affirm that, since in creation, resurrection, or regeneration, the human being affected has absolutely nothing to do, therefore in the work of salvation no soul can do anything but rely wholly and helplessly upon God. It may not be wise to push any one of these analogies so far as this. We know that even the parable of the Sower had to be modified by Christ Himself when He applied it to human beings. Perfect as He was in this method of teaching, and unapproachable in wisdom and in skill, even Christ Himself had to deduce from the parable of the Sower the strange moral, "Take heed how ye hear"—an act quite incompatible with the nature of insensible and unintelligent soil; and in another gospel, "Take heed what ye hear," which, in a strict application of logic to the

figure employed, would be the most absurd and incomprehensible of lessons to draw from the text. But these examples clearly show us the limitations of all teaching from figures, and the universal need of watchfulness and care in any attempt to interpret metaphors, or tropes, or parables, as well as the imperative necessity of not pushing any one of them too far. If the figures of creation, regeneration and resurrection did necessarily teach that man had nothing whatever to do in the matter of salvation, we should be constrained by other passages of Scripture which are not figurative, and which clearly teach something quite different from that, to modify or explain, or even to explain away, the inferences from such mere metaphors.

But even these figures do not teach that. At least, so far as resurrection is concerned, it is by no means a perfectly clear deduction that the human will has absolutely nothing to do in salvation. Lazarus certainly had something very important to do in the case of his resurrection from the grave. He not only "heard Christ's voice," but he "came forth." And yet in no figurative sense, but in the most literal possible he was dead, and he was raised from the dead. To illustrate what every other resurrected body must do, even in the final and universal resurrection in fulfilment of Christ's prophecy, he "heard the voice of Christ," and he "arose from the dead," and he "came forth" from the tomb. The figure of resurrection certainly does not imply total human inability when it is applied to the case of salvation from sin. It does teach, on the other hand, that the human will has something important to do in the case. And substantially the same thing might be shown in connection with the other figures of regeneration and of creation.

But I do not care to press these considerations now. I choose rather to revert to the definitions. Admitting the distinctions made between natural and moral ability, I wish to ask what is meant when we are told by a venerable standard of orthodoxy that "man is not able by his own strength to convert himself or to prepare himself thereunto."

The Westminster Confession of Faith, which is just now the object of some affectionate and solicitous inquiry upon the part of its friends, affirms in the ninth chapter and the third section,

that "Man, by his fall into a state of sin, hath wholly lost all ability of will to any spiritual good accompanying salvation; so as a natural man, being altogether averse from that good, and dead in sin, is not able by his own strength to convert himself, or to prepare himself thereunto."

It will be observed that emphasis is laid upon "*that* good," viz., "any spiritual good accompanying salvation." And the prevailing interpretation of these words may fairly be deduced from the authoritative statement recently issued by the United Presbyterian Church of Scotland in its "Declaratory Act," as follows: "Actions which do not spring from a renewed heart cannot be spiritually good or holy—'such as accompany salvation.'"

Or, in other words, if an act is not done out of love to God, it cannot be particularly pleasing to Him, and if it is done with a feeling of enmity or hatred towards Him, however excellent it might otherwise appear, it cannot be acceptable to Him. It is not, therefore, "spiritually good or holy," in the theological use of those words.

This same "Declaratory Act" of the U. P. Church of Scotland, still farther interpreting the chapter of the Confession now under review, affirms: "The doctrine of man's total depravity, and of his loss of ability to do any spiritual good accompaning salvation, is not held as implying such a condition of man's nature as would affect his responsibility under the law of God and the Gospel of Christ, or that he does not experience the striving and restraining influences of the Spirit of God, or that he cannot perform any actions in any sense good."

Now, then, it is with reference to this interpretation that I believe that a most important philosophical distinction has been overlooked. I recognize this interpretation as fairly representing the majority of Presbyterian theologians upon both sides of the ocean. And I believe that the Presbyterian pulpits are modifying their teachings more and more in the right direction concerning the essential part which man takes in the work of salvation. They are recognizing and emphasizing the indispensable co-operation of the human will with the divine. But the old-time doctrine of the impotence of the unregenerate man still

obtrudes more or less, and is a more or less serious hindrance to a clear apprehension of the subject. And it is with reference to this particular point that, in my judgment, a most important philosophical distinction has been overlooked. It is this:

Will as an inclination is one thing, will as volition is quite another. We must distinguish sharply between the impotence of the will considered as an inclination, and the ability of the will considered as a power of choice. There is a radical and ineradicable difference between will as an inclination and will as exercised in a single case of choice or preference. The distinction is similar to that commonly made between sinfulness and actual sins; one term refers to a condition of the nature, and the other to some particular act which expresses or reveals that condition. In spite of sin and all its disabling effects, every human being, whether regenerate or not, still possesses ability of will as a power of choice; but there is not any individual whatever that has any power adequate to turn the current of his life and transmute the inclination of his life from sin towards holiness. That is exclusively a work divine, and only God can accomplish it. In that, man is by sin hopelessly disabled. But he is not disabled by sin from exercising his freedom of will as a power of choice.

I am well aware of the extreme difficulty of making clear any such distinction as this. The word inclination, if it is accepted for the purpose, must be employed in a purely technical and philosophical sense. Its ordinary acceptation must not be allowed to intrude. It must not be understood as describing a temporary emotion or desire. But in this theological and special sense it must be accepted as referring exclusively to either one or the other of the only two possible tendencies of human character—the natural or unregenerate, or, the spiritual or regenerate.

Those who have ever sat under the instruction of Prof. W. G. T. Shedd will readily accept this definition. According to that profound and accurate thinker, the term inclination, theologically interpreted, describes one of two things: either the tendency towards righteousness which was given to Adam by creation, or the tendency towards sin which was given to Adam and to all his descendants by the fall. These two inclinations are all that

are possible to any human being, the term inclination being employed in this limited and special sense. The original inclination was imparted by God. It was within the power of Adam, by the exercise of a mere volition or single act of the will, to change that first inclination into the second; but it is now no longer possible for any human being whatever, through the exercise of volition or a single act of the will, to change the inclination back again. Every human being is conscious of this inability when once its understanding is enlightened by the truth of God. And it is a matter of experience that in the unregenerate state the trend or tendency of the entire life, that is to say the inclination, is towards selfishness; but in the spiritual or regenerate state the inclination is towards love.

I have no zeal whatever for this particular word, inclination; but the truth of experience and of Scripture which I am endeavoring to bring out into view by means of it is, as I firmly believe, of vast importance. Let any other word be chosen if need be, but let the truth be not overlooked.

If, however, the word be accepted in this special and limited sense, my meaning will be clear when I affirm that "moral inability" applies only to the will as inclination. It does not apply to will as a power of choice. The ability of the will as an inclination was irrecoverably lost by the fall, and only a power divine can change the tendency of the entire character. But the ability of the will as a power of choice, in the exercise of any volition whatever, is not lost. It was not forfeited by sin.

Accordingly the human will can choose whether it will pray or not pray, whether it will watch against temptation or not, whether it will employ the means of grace which Divine love provides or not, and in the exercise of this ability of will as a power of choice its responsibility consists. The human will is free to exercise its unrestrained power as an instrument of volition in seeking or rejecting the aid of the Divine Spirit which is incessantly offered to every human being until it is finally and irreversibly refused. The human will is able "to prepare itself for conversion" or regeneration (the Confession of Faith to the contrary notwithstanding), in this sense, that it is able to turn to God in prayer for the indispensable aid of His Spirit. The

transforming influence of regeneration is beyond its ability. The reversion of the inclination is the exclusive work of God. But the ability to look towards God in the prayer for a better life, and to ask for the interposition of His saving grace in regenerating and sanctifying the soul, is wholly within the reach of the unregenerate. And, therefore, all men may be called upon to exercise it. And this we affirm when we say that "moral inability" does not apply to the will as a power of choice, but only to the will considered as an inclination, in the limited and technical sense of that word already described.

The advantages of a general acceptance of some such distinction would be manifold. It would serve clearly to fix the nature of man's responsibility before God and its extent. It would point out plainly the limits of that misleading phrase "total depravity," which really contains a vital truth. It would render it far more easy to explain the doctrine of Scripture which underlies that most confusing statement of the Confession of Faith that "man by his fall into sin hath wholly lost all ability of will to any good accompanying salvation."

It would aid every interpreter of Scripture in discriminating between those manifold passages both of the Old and of the New Testaments in which the indispensable aid of the Holy Spirit is affirmed, and those other, equally important, in which the reasonable appeal is made to that remaining ability of the will as a power of choice by which every man is left to be the arbiter of his own destiny. And it would aid somewhat, I venture to believe, in modifying, if not in wholly removing, most of those misunderstandings which now obscure the border lands between the Augustinian and the Arminian theologians.

"FOR HIM."

[Contributed to the American Institute of Christian Philosophy.]

By Rev. Geo. W. King, Providence, R. I.

THE question of teleology in the cosmos is both much advocated and much disputed. Mr. Darwin, it is well known, and others of his school, are unwilling to accord theists any certainty in the matter. Of course the teleological or design argument is based upon the assumption of design. If design is granted, the conclusion as to a Designer is but an inference from premises that involve it. The deeper question is as to the fact of design. Is there design in nature, or is there not? This is the real question in dispute.

That there is design it is not my aim to determine. The fact is assumed. The purpose of this article is to inquire as to the ultimate end or aim of cosmic teleology.

It is plain that this is a separate question from the more general notion of design. That there is design and a Designer we assume. The inquiry now only concerns the ultimate aim of all design. Is man that aim or object? or is there some object higher than man for which all things were created, and toward which all things move, in which man is but a part, though perhaps an important part, of the plan?

Assuming the position of New Testament revelation, the question is easily solved. "All things were created . . . for Him." This, then, is the ultimate end of all final causes—Christ the eternal Son. "For of Him, and through Him, and to [unto] Him, are all things: to whom be glory for ever." "For it became Him, for whom are all things, and by whom are all things, in bringing many sons unto glory, to make the captain of their salvation perfect through suffering." And nothing can add to the dignity and beauty and force, or authority of these words of Scripture. But there are certain implications of the doctrine that need to be made explicit.

Besides enhancing the dignity of Christ above every creature, this scriptural view is helpful to the doctrine of teleology itself as an argument for the existence of a divine intelligence. It makes reasonable the inability of man to comprehend all the accidents or parts of the plan. "The purpose of things is largely hidden from us, and there is nothing to do but to confess that God's ways in the world are past finding out. Evidences of skill abound, but the purpose of the whole is hidden [to philosophy]. We cannot even surmise the meaning of most of the arrangements of the system. We see no end or none which seems worth realizing." If the ultimate object of teleology were man, or even the natural revelation of God to man, our inability to read the lesson perfectly would not destroy its reality or value; but, if, primarily and pre-eminently, all things were made for Christ, then clearly the difficulties concerning the fact of design are only the more to be expected. The aim is not for us, but Christ; and the lesson we read is but one of the subordinate ends reached in the grand march of cosmic order toward and around the eternal Son.

But is man, then, only an accident in the divine plan? This naturally provoked inquiry is answered by affirming, there is no accident in the divine plan; unless be meant by the question that man, as undoubtedly assumed, was made for Christ. In this latter sense man is but an accident in cosmic teleology. Christ, as said, is the end of all. If it be further inquired, how man can be the subject of so much consideration on the part of Christ, if this assumption be true, the answer is not far to find. It is not necessary to assume that Christ has not relations of beneficence to other intelligences, and, indeed, to all conscious life. That He has would seem to be the fact.

Assuming that He has such relations, then the thought that Christ exhibits Himself to man so wondrously resolves itself into the other and broader thought of His beneficent relation to all life. What that relation to other intelligences is (assuming there are such) we do not know. But the fact of such relation assumed does away with the fact of relationship to man as either peculiarly wonderful or peculiarly beneficent. It is but one form of universal beneficence.

The thought, moreover, that the end of all teleology is Christ does not reduce or minify the thought of infinite love as manifested toward man in creation and in the Incarnation, and to other conscious life in ways peculiar to their possibility and needs. "Concerning the motive of creation pure speculation can say nothing positive. We can only point out that if the divine absoluteness is to be maintained, this motive must not lie in any lack or imperfection of the Creator. For positive suggestion we must have recourse to our moral and religious nature; and this refuses to be satisfied with any lower motive than ethical love." Christianity confirms this conclusion of the ethical and religious nature, and reveals beyond doubt the motive of the Incarnation. The thought of this paper does not contradict or minify the fact. Indeed, rightly understood, that love is enhanced thereby. God must be for Himself, but the infinite "Himself" is infinite love. "God is love." And the infinite "Himself" may find His highest self-realization and satisfaction in manifesting Himself in forms of beneficence to finite consciousness. And so the ultimate aim of teleology in Christ may be the infinite satisfaction in God in manifesting Himself in goodness to conscious spirits. Thus the aim of all teleology is Christ, but Christ in conferred and manifested goodness. Christ finds infinite satisfaction in infinite relations of infinite beneficence to all cosmic intelligences and life.

In this teleology many parts of the plan may be subordinate to the ultimate aim, and thus have man as their immediate object. This is undoubtedly true. Thus, this earth is for man. Over it he is lord, and for his present abode and use was it fitted up. Other things, no doubt, converge to the same end, or will in the future life, as then there will be other conditions than those of this earth-life. The sense in which other intelligences are for man (I. Cor. iii., 21–23; Heb. i., 14) need not concern us. There may be a mutual relation, between them and us, of dependence and benefit. Certain it is that some things are peculiarly for man, and, no doubt, other things for other intelligences and, perhaps, all intelligences for each other; but just as certain is it that all things are for Christ, and that He is "over all, God blessed for ever."

SOCIAL LIFE IN THE CHURCH.

[A Paper read before the American Institute of Christian Philosophy, April 7th, 1890.]

By Rev. John Y. Dobbins, D.D., Trenton, N. J.

SOCIETY presents many grave problems the solution of which will task to the utmost both the wisdom and courage of our very best people. They are questions which concern the physical, intellectual and moral welfare of the masses. The multitudes, as well as the scholars, are discussing these subjects, and are doing so with a breadth of inquiry and a wealth of information, which a quarter of a century ago they themselves scarcely dreamed of ever possessing; so rapidly is knowledge diffusing itself through the common mind. Aroused by a sense of what they regard as injustice, and stung to ambition to improve their condition by the feeling of inferiority, the people who live at the bottom are straightening themselves up; and the movement thus commenced we may be sure will be irresistible, and we can hardly doubt that in it there is the beginning of a revolution in human society; a revolution, however, so we fondly believe, as peaceful in its methods as its results may be beneficent. Questions are being asked which in other years were unheard of, and those who ask these questions themselves not long ago pursued their toil in obscurity. These interrogatories flame with an intensity of meaning and they confront our social order. No man can ignore or lightly regard these questioners who loves his kind and who feels a humanity stirring him which is greater than gain and larger than himself. Never, indeed, were the opportunities for noble endeavor and splendid service in behalf of men as great as now, and they who own the wealth or possess the scholarship of the age may build for themselves monuments in the hearts of their countrymen which will endure longer far than marble or bronze. But we are to speak of Social Life in the Church. What has been said, how-

ever, is not inappropriate as an introduction to this subject. The Church of Jesus Christ, composed as it is of those who observe His sacraments, cherish and practise His teachings and acknowledge Him in worship, must in the nature of things bear an intimate relation to the great sociological problems and their right solution. There is no organization known among men which can exert a tithe of the influence possessed by the Christian Church. But there is imminent danger that this mighty power may lie still or be but partially exerted, or that it may be even ill used. The Church is regarded doubtfully by some, her aims misinterpreted by others, and the glory of her life is clouded to many sincere minds by difficulties which do not yield easily to explanation. The question, what is the Church for? commonplace though it may be, may be, not without advantage we think, answered yet once more. It certainly exists for man, not for itself. The glory of its Founder is His self-denial. As the Church is imbued with this spirit it is His Church, as it is not, whose it is the object of this paper does not require us to say. It exists for man not only as a refuge from the common toils and cares of life, by affording a place for worship and communion with high and lowly thoughts of God; but it exists to show by its inherent life how God would have men live together and by what law they should be governed in their acts toward one another. The divine conception of the Church is, we think, best illustrated in the first years of its history, as in the instructions of the inspired writers of the same time it is by divine authority set forth. The reader of the New Testament does not fail to be impressed by the impartial kindness which controlled the affairs of these very first members of the Christian Church. They used hospitality without stint. The doors of their homes stood open. They loved one another. Personal distinctions were merged in the common honor of following Christ and doing His will.

As then, so to-day, the Church stands in the community as a witness to the supernatural and the divine. She gives her testimony without cessation to the throngs about her. Her sacraments, ordained for all time, are the visible expression of the two great facts of human history, sin and redemption; and in which facts is found the all-sufficient reason for her existence. Her

worship—the hymn and prayer and meditation in God's great words—is a sublime expression of our spiritual nature, as it is a most touching prophecy of that perfect service which shall be offered by man in the better life beyond. The Church is a teacher as well as a witness. She comes to men with the authority of that truth which commends itself to every conscience. She gives a voice to men's deepest needs and describes the great perils which attend the present life. She shows the sweet reasonableness of righteousness, and fondly exhibits the glory of Christ-likeness in man. She brings to us motives to high endeavor which are great with the greatness of our immortality. She tell us, with a repetition which never wearies, for men are always glad to hear the story, of Him who gave Himself to us, whose perfect life, treasured in the reverent memory of men, is an inexhaustible legacy, whose words both teach and transform the willing scholar; mighty words, indeed, which move like armies around the world, excepting that they conquer with truth and love. The Church is teaching men to look at the invisible; not the invisible only, which is beyond the grave, but the invisible here and within us. She seeks to have us become conscious of our inmost nature, of the fine sensibilities in which it abounds and of the great wants which oppress it. She would teach men that to deny themselves is an infinite advantage and that to love is greater than to hate. But the Church does not fulfil all her calling when she bears witness to the Divine and when she teaches the truth. There must be embodied in her communicants the principles of Christianity, which, though having a peerless grandeur by themselves, need examples of flesh and blood to bring them close to men. And it is in the social life of the Church that this exampling of the truth is to be done. Men were made evidently to live together. The city and town as well as the family are the realization of the divine order for the race. He who lives apart from other men does violence to himself, as he also gives offence to God and excites the commiseration or contempt of his fellows. The social life of the world, however, is not all it might be or even should be. It is marred by cruel selfishness, disturbed by wicked ambitions, and often dominated by a pride as relentless as it is abominable. False

notions prevail among men about duty and sacrifice and their conduct as a consequence is at variance with the teachings of the Bible and the best promptings of human nature. The social life in the Church is distinct from that which is of the world and bears the marks of an entirely new and better life. It is a peculiar life just as is that of the home, or of the school. The Church, in other words, is a new society intended to supplant the old one. While the race is fallen the Church is the path by which men may regain the heights of virtue and peace, and if the spirit of her teachings dwell in her people their social life will charm to her communion and lift into new character many of those who behold how these Christians live. When we remember that this new society, composed of those who accept Jesus Christ as their Saviour and example, is preparatory to that heavenly community which is with God, and that while on the earth its members are to practise the virtues which are to be their eternal inheritance and joy, we can scarcely place too great an emphasis upon the social life that is in the Church, nor have too great expectations of it.

Let us ask and carefully answer the question, what should be some of the characteristics of this new society?

First and foremost, it should be distinguished by fervent sympathy with all men. It is to Christianity that we are indebted for the magnificent truth that a man's obligation to serve his fellows is limited only by his opportunity; and, further, that there is a world-wide brotherhood in suffering and sorrow which cannot be disregarded without sin. We are taught that there are deeper relations than those of mere birth, and that whatever the differences separating them, whether of language, education, morality or religion, men are bound together as brothers in flesh and blood. The Church derives her authority from Him who made all men the objects of His compassion, inasmuch as all men were troubled and vexed by evil. There should be no sorrow or joy which men feel that does not awaken a response in the Church. In the lanes and alleys the feet of her people should pass on errands of sympathy. The cry of distress or the sob of grief, by whomsoever uttered and wherever heard, should hasten with the quickness of love the consolation and good cheer of

Christianity to those in need. The Church, in holy things and loving deeds, is the servant of men for whom Christ died. Her people have been recovered to the divine favor, and in their new life find no desire greater than that which moves them toward those who are still estranged from God. While themselves nearer to God they are also closer to men, for with the new thoughts of the divine character there come larger and more accurate views of men's needs and of men's possibilities. The more one loves God the more deeply does he yearn toward those who do not love Him, and the greater is his ambition for the honor of sharing their troubles and comforting their griefs. There should then lie about the altars of the Church an atmosphere of common sympathy with common men. It was the common people who heard Christ gladly. His words were welcome because they were throbbing full of love for those who listened. The Church must see to it that all her people are animated by this Master's spirit, that they really are His ambassadors, robed in lowliness and coveting more than all the world's treasures, wayward and guilty men, to restore them to peace and fellowship with God. If we, when we enter upon the life of faith were to become oblivious to the duties which are owing from us to other men, our Christian profession would be belied, and the spirit of Jesus put at nought. The Son of God in His incarnation clung closely to the Father, but it was thus that He drew nearer to men. And so we repeat that the social life in the Church should be characterized by large sympathy with those who are still without.

Akin to this principle is another which I wish to mention. It is that of mutual affection among the members of the Christian society, by which a community of feeling and interest is inspired and maintained. The distinctions, many of them foolish and as many more wicked, which divide men in this world of ours, among Christian people must disappear if they are not to fail of their mission. Character should be the only badge of honor among them. All the measurements of men's worth, as commonly used by men, are cast aside as unworthy and false, and the differences which must ever exist as long as human endowment and opportunity differ, while they are recognized, yet they

are held to be subordinate to the consideration of goodness and usefulness of life. The Church is God's home for His children on earth, and they who dwell in it if they are not intruders breathe the family spirit. The household feeling should be everywhere rife, in act and word it should break forth, it should reign just as supremely as does the domestic feeling in the single home in which abide the brothers and sisters with their parents; the only difference being that the one is natural, the other supernatural. And because the latter is supernatural, all the more wonderful and impressive it must be, if the new family spirit, larger and sweeter than even that of the ordinary home, is incarnated in our natures and exampled in our daily lives. The New Testament is redolent with the domesticity of the new spiritual household. It breathes through many of the most precious words of that holy volume, and imparts a fragrance and beauty to some of the grandest conceptions contained in it. The people who live and struggle on its pages are brothers and sisters. The old natural relations still remain, it is true, but new and broader and profounder ones underlie and overreach these; and, indeed, give increased sanctity to all the natural relations of life. As we fondly gaze at the Church portrayed in the New Testament, notably in the book of the Acts of the Apostles, we discover persons of most dissimilar temperaments, and diverse stations and fortunes, of almost every variety of mind and manner bound together by the power of this new life which has taken hold of them. They join their hopes for a common cause, and they rejoice and weep together. We can not but feel, we would not, indeed, feel otherwise if we could, that this picture of the early Church is made with the fast colors of inspiration and that God means it shall never fade out; and, moreover, that it stands not only to be gazed upon with admiration, but in this our time, aye, in all time, to be transferred to real life. The details of the picture may not all be reproduced and need not be, perhaps we should say ought not, or, indeed, can not be, but with all allowance made, the new affection, mighty and tender, portrayed in the inspired records of the early Church is for all time to illustrate, and for all men who would be of God to realize. There is also this to be observed as an essential characteristic of the social life

of the Church, that it is thoughtful and endeavors to keep abreast with the deeds and achievements of man. Whatever men do in literature, art or science, in trade, manufactures or inventions, is of interest, or should be to the Christian. For so closely interwoven are the spiritual and natural as practically to be one. And the one influences the other. What men do in the market-houses and counting-rooms, the struggles they undergo, the fortunes achieved, the toil accomplished, the calamities suffered, the poverty fought against, the sorrow tasted; all things whatever they may be that happen to men should be to the Church the subject of careful study; for if she seek to save men it must be that whatever interests men should interest her. And it is only as the Church enters into the life lived by men, that she can save the good in that life from the evil which endangers it. Her social life, therefore, should be a school for the reverent study of human affairs. It should be a centre where should gather all voices to tell their stories of what men are doing and suffering. Nothing human should be counted alien to the heart of the Church. The most sensitive students of public affairs, the most sleepless observers of currents of public feeling, the most patient and thorough watchmen in the towers overlooking the fields of life, these should be, these *are* men of God. If Christ were on earth to-day would He be indifferent to the marvels of man's skill and power? Rather would He not make of them illustrations to illuminate the more enduring wonders of the spirit nature and of the spirit realm? It is not the best Christianity which takes no account of what men are doing in the manifold activities of the world. That is complete Christianity which touches man on all sides and makes him feel that in nothing innocent which interests him is he without her sympathy and fellowship. Let then the Church through her people count it one of the privileges and duties entrusted to her to know the step of the world and what the music is to which it is marching. Inasmuch as it is through the secular that we pass to the sacred, through the temporal to the eternal, and through the natural to the spiritual, let the Church walk with men to their daily tasks and keep them company in their struggles and achievements, that it may the more easily and the better lead them across the bound-

ary which in thought and feeling lies between the realms of nature and grace. The social life of the Church should then be studious and intelligent in public affairs.

But it should have fervent faith in God. It should realize its opportunity and calling. It should be marked by simplicity. It should adopt every means at its command to make the Church attractive to men. The difficulty often is that erroneous views of Christianity are produced by the partial representations of it which are seen in the Church. Within her walls there should be a welcome for everything that is good. In the years not very remote we believe that she will furnish means for social pleasure, which without being derogatory to her religious character, will make the path from the world to her fellowship not less narrow, it is true, but shorter and more natural to follow. The present time puts new possibilities within the reach of the Christian Church, but to realize them, new means are also placed within her grasp. Baptized with the Spirit and consecrated to the saving of men by the preaching and exampling of the truth, the Church, if she will use the mighty social forces at her command as auxiliaries to her great work of building men up into God, will have a widening future of usefulness and blessing to mankind.

As the houses of worship stand on the streets which are lined with homes and stores and are filled with the traffic of the world, so the Church in her life should in all things human and innocent touch men everywhere and be in sympathy with them.

CONCESSIONS TO SCIENCE.

G. MACLOSKIE, LL.D., PRINCETON COLLEGE.

WE may compare the style of the Bible to that of a specialist in science who addresses a non-scientific audience about religion, occasionally illustrating his theme from nature. His illustrations will be found correct in substance, but not very fully elaborated, nor put in the precise terminology of the class-room. They will be more or less liable to misapprehension, especially if the hearers have already acquired false notions of the subject-matter. Men come to Scripture, and to other books, with preconceptions which distort their vision; and sometimes strangely fancy their errors confirmed by what they read. Our bias is not dissipated by an endeavor to renounce all science; for we cannot cast adrift all our opinions about the operations of nature.

It is sometimes urged that the divine sanction entitles the casual references of Scripture to natural occurrences to rank as science; and it is claimed that concessions, if any, are not to be made to science, but in the opposite direction. This is so far true, that even independently of inspiration, the authority of Scripture is very high among scientific men. Its writers were shrewd observers and sober reporters. When Moses and Herodotus were found on opposite sides on the question of the grape-vine in Egypt, there was little reason for doubt as to which authority was entitled to most respect; and the mural pictures of a vintage, and also the recent discovery of vine-leaves in a mummy-case have justified the decision. On questions of ethnology and kindred sciences the Bible is treated with respect even by sceptical writers. But our recognition of its value, and even of its inspiration, does not carry the right to establish laws of nature on its incidental references to physical phenomena, or to foreclose further examination (a course never permitted). Our object in examining its statements may be to find out whether they are or are not true to nature; and we are not at liberty to

erect our science upon the Scripture, and then to turn round and prove the Scripure by our science. Our object may also be to find out the sound rule of its interpretation, whether it is to be read according to the peculiarities of contemporary human thought and language, or as mechanically framed so as to pre-empt all the acquisitions of modern and future scientific research. The attempts formerly made to quash certain nascent sciences on account of supposed anti-religious tendencies, though favored by able men, were not founded upon anything in the Word of God, and were mischievous in their influence. When Francis Turrettin argued that the sun travels round the earth, because the Bible represents it as moving and rising and setting; and when John Owen expressed his hopes that no various readings of Scripture should ever be found, and Bishop Whitby said that there could be no various readings of such a book; and when divines fought the idea that Hebrew worship was modelled in part after the Egyptian, and claimed that New Testament Greek must be the purest in style of all Greek; all these good and able men were unwittingly working against the Bible, and we are thankful that their efforts proved abortive. In such cases there have been concessions, not by the Bible so much as by its adherents to scientific methods and discoveries. As we employ new discoveries in other branches of knowledge, so should we be willing to use whatever science may bring forth to elucidate the Word. Whether any useful contributions can come from such a source is not determined *a priori*, but by experience, and experience has answered the question affirmatively.

This principle is recognized in the exposition of the most authoritative documents. Before legal tribunals a written contract, even when by deed, or a will, or an imperial statute, is interpreted not simply by the words written. Though the verbiage be drawn with special regard to precision, yet local considerations, customs of trade, the relations of parties, and subsequent changes in their relations, control the grammatical construction or add to the written provisions. The *primâ facie* interpretation is not always the true interpretation. The effort is not to subvert but to give effect to the intent of the authors,

and this may involve concession by the grammatical construction to the general drift of the document.

In the case of the Bible we are compelled to this more forcibly because of its well-known freedom of style, and because the time and place of composition of the documents are so far removed that we are often at a loss to know the meaning. Here we have a book that contradicts itself in the letter, often in the same context, that speaks impossibilities, that makes dead people be only sleeping, finds Elijah in John the Baptist, as if there had been metempsychosis, makes God repent after saying that He cannot repent, speaks enigmatically of a temple where it means a man's body, and rarely quotes itself with verbal accuracy. These things were done with open eyes, and no error was committed. The truth was there, but robed in picturesque rhetoric, and shining with a force and beauty unknown to legal documents. Our view of inspiration must leave room for such peculiarities, as well as for errors in transmission and translating. It should only insist that when we reach, by all the appliances available, the actual intent of the Scripture, we shall find no mistakes. In other works, ancient and modern, the mistakes are not merely rhetorical. If any residue of error should appear in the Bible, after making allowance for its style, this would raise the issue of its authenticity. Whoever holds to its plenary inspiration is thereby compelled to make concessions for its style. The ultimate problem is whether it is more consonant with the whole evidence to yield what is necessary, or to reject the book which cannot be easily harmonized with nature.

Every apparent collision between scientific dogma and the Bible gives us a choice among four alternatives: We may reject the Scripture, in whole or in part; or we may ignore or condemn what calls itself science; or we may be non-committal, and leave the case undecided; or we may endeavor to effect a reconciliation.

While atheists sometimes admire the Bible for its historical and antiquarian value, and for its contributions to the science of comparative religion, they presume against its reliability in doubtful cases. Not a few Christians reach the same result by a modified theory of inspiration, thereby finding a loop-hole for

the assumption that divinely inspired men may give distorted views of nature and history; and they neatly summarize the case by the remark that it is not a scientific book. The difficulty is not in this way avoided. The book which claims to be God's Word, if not genuine, is blasphemous. That it is not a blasphemous and fraudulent book, is shown by its morality, by its theism, and by its mode of dealing with great themes. Besides this, its history has been confirmed, even by sceptics, and is daily receiving new confirmations: and it avoids the coarse errors about nature that abound in other books, ancient or modern. These facts have to be confronted by all who reject it; and the puzzle remains how a book (or rather a group of independent booklets) can have what they regard as errors on small matters, and yet be devoid of error in its representation of great things.

Perfect freedom of scientific speculation, so characteristic of our age, confers on the public the indispensable privilege of ignoring or rejecting much that is promulgated in the name of science. The same privilege is exercised by professional scientists, who pay little attention to theories unless well supported by evidence. But the novelty of a theory is not regarded as an argument against it; and unwelcome discoveries or speculations are not suppressed by giving them a bad name. When a theory has fought its way into provisional recognition, it is useless to argue against it because of its dangerous character. Its author and its critics are very frequently incompetent to determine whether its influence will be salutary or injurious; and their chief concern is not for this, but for its truth or unsoundness. The most fertile discoveries are usually those which contradict men's anticipations or even their wishes; so that able investigators are specially attentive to these. To reject or ignore what we do not like, merely because we think it ominous, is a vain attempt to avoid risks by going blindfold.

In complex cases the non-committal course is the most satisfactory. We should show, if we can, that no contradiction is proven, but we should not insist on some particular mode of explanation as the only sound mode. There has been a good deal of what appears to us foolish and sinful playing with Scrip-

ture in this direction, every man drawing on his fancy for schemes that are to be rejected by the next adventurer, and all resulting in the impression of guesswork. It is on the exordium of Genesis that we have seen most of this. Is the work of the six days local or general? is the record about actual facts or only a vision? if of facts, did they occur immediately before the advent of man, or were they spread over the geological ages? Are the days each of twenty-four hours, or are they long periods? If natural days, are we to put the geological periods before them or between them? If long periods, how are we to correlate them with the geological periods? Or are the days not periods of time at all, but only rhetorical marks, much as we employ other terms (section, age, epoch, period, place)? Were all the species of each period created *de novo* and independently of others, to be exterminated at its close, or were some of them continued into following periods, and made the stock from which new species were produced? Or are we to adopt the theory of Omphalos, holding that the geological formations, fossils and all, were created instantaneously just as we find them? Or are we to follow Lange's extraordinary comments, which as C. B. Warring shows, though aiming well, are sufficient to make infidels of people? Mr. Huxley did not display his usual acuteness when in New York he expressed his surprise at the singular elasticity of language that can adapt itself to so many different views. The same elasticity will be found in the introduction of one of his own books, if interpreted by different readers who know nothing of the subject-matter, and who all insist on expanding its hints into a commentary. The Bible narrative does not greatly exceed one of his introductory chapters; it takes in perhaps the entire field of geology, and is admitted to have a general correspondence with the testimony of the rocks; on the religious side it is remarkably clear, full and satisfactory, giving us the pure monotheistic faith, and the divine origin and development of heaven and earth, with man in the likeness of God; on the natural side it furnishes hints, keeps clear of errors, and leaves the fuller exposition as an exercise for our wits. The account of the Deluge is almost equally rich in discipline and in difficulty. Was it partial or

general? and if general, was it simultaneously so, or only collectively so, by a series of successive floods in different regions, with immense destruction of life, such as occurred at the close of the ice-age in both the Old and New World? and a host of other problems are more or less closely associated with the event.

We believe that the present condition of knowledge does not justify a definite decision among these views. It would, however, be wrong on this account to condemn them as useless, if they are properly presented as only possible solutions. When somebody alleges that Genesis and geology are irreconcilable, several possible plans of reconciliation combine cumulatively to show that the objection is unsound, though we may not know which, if any, of the plans is genuine. On the question what is the real principle of conciliation, we may wisely say—perhaps suggesting that the tendency of the argument points in a particular direction—that we are ignorant. This is the method followed elsewhere, of independent doctrines cordially accepted, each on its own evidence, though their correlation is a puzzle: the Calvinist deals thus with predestination and free-will, the Arminian with foreknowledge and free-will, and the scientist with the problems of matter and force, and of mind and body; although every man may do his utmost to bridge over the hiatus in his knowledge.

The aim of the believer in the divine origin of the Bible must always be ultimately to effect a conciliation; to show that science, rightly understood, and the Bible when fairly interpreted agree, or at least in no way disagree. For this end some measure of concession is necessary, and is granted by every one. This ought to be done not heedlessly, nor for covertly renouncing the Scripture, but to find out what was really intended by the Holy Ghost when speaking to us in language tainted in every phrase by traces of human infirmities. The most conservative commentators yield in small matters, and occasionally on more important points. No intelligent reader now believes that the Book of Joshua meant exactly what it said about the sun moving either backward or forward. Even the Jesuit professors in the Roman University teach that we should read the passage

just as we read the almanac that represents the sun as rising, passing the meridian, and declining; and they hold that inspiration does not limit the age of the world to six thousand years.

It is sometimes feared that the stability of the weighty matters of our faith may be endangered by taking liberties in other things. This was the aspect in which the divines of former times regarded the subject, when they so earnestly resisted new ideas. They were willing to employ human reason—the light of nature was their term—to confirm the Scripture and to employ the argument from contradictory reason against the most glaring errors of Roman theology; thus far they would bend the words of Scripture into conformity with human judgment. But they condemned Socinianism for placing vague reason, or philosophy, in the citadel, and for uniformly making revelation subordinate to its own guesses about the divine character and about the mode of our salvation. Their opposition to Socinianism and to other errors of doctrine rendered them suspicious of all knowledge not derived from the Bible, and very liberal toward everything that could claim its verbal or inferential approval. So in our own day there is a wholesome jealousy of a kind of criticism that indicates more respect for men's general likings than for the Word of God, and which sometimes asks to be recognized as scientific. That such general likings and notions are unreliable is proven by the mere fact of antagonistic schools of abstract philosophy differing in fundamentals. Hence, though we wish to believe that there is some sound philosophy in the world, it would seem as if the dark ages were in great measure still upon us. The danger and uncertainty of such systems may have been contemplated by the warning against being misled "by any one's philosophy, after the traditions of men"; and even in the nineteenth century the warning is appropriate. There is no such warning found in Scripture against our searching into nature (the "science falsely so called" of I. Tim. vi., 20, does not mean this, and is amended in the Revised Version). Time was when science was spun out of men's imaginations; and the name of science is often still used as a trade-mark for their theological leanings, as where we are soothed by the so-called scientific discovery that punishment of

sin cannot be permanent, but like a Faure battery loses its lightning through lapse of time. The science which runs in the inductive track is of a different character; and, broadly speaking, we think there is no room any longer for two schools of scientific thought. Nature, like Scripture is an infallible teacher, if we can skill to know it. Men may misunderstand them both, but progress is being made in their exegesis. The employment of science for the elucidation of Scripture rests on the same principle as the employment of one part of Scripture to elucidate another, though written by a different hand and in a distant age. We employ Scripture to explain Scripture in matters of doctrine, and science to explain Scripture in the things of science. In both cases the parallelism may be erroneously assumed, or may be misapplied.

Another problem on which science will have its say is that of miracles. Mr. Huxley has demonstrated that the possibility of an answer to prayer ought to be granted by every candid investigator; and the same argument will include miracles. There may be, as he says, a great Being (whether divine or not) above our region of the universe, able to surpass us in controlling nature, and, without violating any of its laws, to do all that miracles involve. In some instances natural explanations of certain miracles are suggested in the Scripture; very often we are left in the dark whether a wonderful event was miraculous or only providential, thereby discovering that the Word of God is less tenacious than ourselves of the miraculous at every turn. Scientific ingenuity has failed to account for some of the miracles; yet it is supposable that even many of these may have been produced by God not along new lines of causation, but by directing and expediting causes already at work, and that such expediting may involve merely the cumulative concurrence of waves of natural activities. Could this suggest a possible conciliation of the evolutionary and biblical views of the origin of man, as by a special evolution, divinely guided and expedited, miraculous, yet moving parallel with natural development? Science says that miracles are not impossible, and leaves to others the question of their actuality.

The Bible seems to be indifferent as to what physical inter-

relation we shall insert between phenomena, so long as we recognize their hyperphysical subjection to the divine will. If the stars are holes in the revolving floor of heaven, whereby streaks of glory struggle through; or if they are lamps pushed overhead by good angels, and the sun driven in a big chariot; or if they are all tied together and swung round each other and round a centre by an unknown something which we call gravitation; whether they flashed out of nothing in an instant or were slowly evolved from nebulæ; these are important questions for science, but of small moment to the Word of God, which has a trick of sticking to its own business. It was at one time deemed necessary to find the finger-marks of the Creator coarsely stamped on every part of His works, and even Leibnitz deemed a mechanical theory of nature atheistical. But the mechanical theory of the heavens is accepted, and astronomy has become the least dangerous of the sciences. The same theory is extended to the rocks, minerals, fluids, gases—all but the organic parts of nature. Has the mechanical part ceased to declare the glory of its Maker, and has the nineteenth Psalm outlived its usefulness? Must He who put into mechanical causation all that can ever come out of it, not be higher than its highest developments? and if we ourselves can control it in a small way, without violating its laws or changing the total quantity of matter or of energy, shall He be unable to regulate it according to its own properties and according to His good pleasure? The believer anticipates that if we could expand the statements of the Bible about God creating and governing all things, we should find the methods of the divine activity as beautiful as the results; and here comes the mechanical theory, professing that the secret is discovered, and offering to fulfil men's dreams of universal causation and of the correlation of all the forces of nature. Though such a theory is not to be hastily accepted, yet we fail to see that its acceptance would be atheistical.

Opposition to novelties, without regard to their merits, but because they are novelties, is the weakness of all professional classes. Lawyers and physicians, and too many scientific investigators, are the slaves of their prejudices; clergymen may even fancy that as defenders of the faith they have a divine right to

be unyielding. But clergymen are by no means the only or the worst offenders in this direction. Professor Morse inexcusably blundered when in New York he singled out the Church as the great enemy of evolution. Darwin himself bore testimony that the first and most intemperate leaders of the opposition were scientific professors in England and France; * and Professor Morse knows very well that the opposition in the New World was furiously started by his own old teacher, Louis Agassiz, not a theologian and scarcely a Christian. Ministers of religion, who saw in Agassiz a scientific oracle, took their cue from him, especially as few of them were able to understand Darwin's arguments. Darwin was more just than his advocate when he declared that the Church is willing to accept any scientific doctrine on which scientific workers are themselves agreed. Tenacity for old ways in religion seems to us a virtue, inasmuch as we do not expect a new revelation of religion; but in natural science, where all nature is before us, with hosts of investigators prying into its secrets, we are to welcome discoveries; nor will our religion make shipwreck if we cast overboard its deck-load of old scientific lumber.

When scepticism dons the garb of science, and the friends of the Gospel doubt whereunto this should go, we are often cheered by the bracing words of Scripture, and especially of our Lord, who never feared that fellowship with nature would seduce us from our allegiance. He sent the disciples not to Homer or Virgil, not to literature or psychology, nor to the sublime abstractions of Euclid; and it is surprising how well the great preachers of antiquity got along without these indispensable articles of the equipment of their successors. But He bid them consider the birds and the lilies, the sheep and the sower, the sprouting of the grain and the signs of the heavens. The best concession that His followers of our time can make is to yield to the Saviour's counsel, that they may know something of the methods of science and the value of its results, and that they may not hand over its study as a monopoly for those who are unfriendly to His cause.

* For the early acceptance of Darwinism by the clergy, see *The Life and Letters of Charles Darwin*, II., 203, note, 236, 287, 323, and III., 112 (English Edition).

VIEWS AND REVIEWS.

FOR the views, statements and hypotheses of the writers who contribute papers to its schools or its organ, CHRISTIAN THOUGHT, the Institute must not be held responsible, nor must the editor. We are responsible only for hearing and publishing what is thought to be worth reading and for presenting them for fair, candid and scholarly criticism.

IF Christian people could see the private letters which reach our office, we fancy there would not be much difficulty in endowing the Institute and distributing its publications. We have just read a letter from a Christian father who is full of anguish because his son is coming under the influence of certain pernicious pamphlets which have been placed in his hands by the emissaries of error. Few of our people are aware of the extent to which this is carried. It is the pestilence that worketh in darkness. When applied to we furnish the antidote by sending CHRISTIAN THOUGHT, but we do not know all the cases and our means do not hold out. You can never tell the good done by placing a volume of CHRISTIAN THOUGHT in a family or in a school library.

A HINDOO gentleman has called a congress of Brahmin priests and learned men for the purpose of incorporating the Bible among the sacred books of India and officially recognizing Jesus Christ as the latest avatar, or incarnation of Brahma, the supreme deity.

MR. GLADSTONE, in his article on "The Creation Story," in *The Sunday School Times* of April 26th, quotes, with commendation, from what he calls "an address of singular ability" on "The Discord and Harmony between Science and the Bible," by Prof. Francis H. Smith of the University of Virginia, delivered before the American Institute of Christian Philosophy and published in CHRISTIAN THOUGHT.

PROFESSOR BASTIAN of Berlin is one of the first of living authorities on ethnographical subjects. Recently, while taking the Philosophical Society of Berlin through the new Ethnographical Museum, of which he is the director, he explained the process of development from the savage to the civilized state, laying special emphasis on man's subjection to nature during his savage state. "But," he said, "the serious mistake made by Buckle is, that he thought what is true of man in his savage state is also true of him during all the stages of development, namely, that man always remains under the dominion of his environment. The truth, however, is, that man frees himself from his environment in proportion as he rises in civilization, so that instead of being nature's slave he becomes its master." A valuable hint in an age when the environment is made omnipotent, while the inherent nature of the environed is ignored.

IT was an old, weak sneer of those physical scientists who rejected Christianity, that theologians so often changed their interpretations of Holy Scripture. Even Prof. Huxley indulged in this weakness. The fact is that there have been three times as many adjustments of interpretations of nature among those scientists as there have been of interpretations of the Bible among the theologians. Instead of deserving a sneer these advances merit credit in both cases. This has been brought to mind afresh by a recent reading of a most sensible address delivered by the accomplished Prof. Charles F. Himes, of Dickinson College, from which we make this extract:

"But, after all, the real progress is marked by the grander conceptions that have unified science. Fifty years ago the most advanced were groping about in the dim light for them. As an illustration, not without special interest to us, the following extract from a review of the state of the scientific world in the 'Messenger of Useful Knowledge,' edited by Prof. Henry D. Rogers, afterward so eminent, then Professor in Dickinson, may be allowable; the nature of light and heat is spoken of as 'the key to physical science yet to be discovered, when the door will be thrown open, and a new and attractive field presented to view, in which simplicity, harmony and beauty will be found to

pervade the material universe.' The introduction of the term 'Mechanical equivalent of heat' was not far distant, and the evolution of the grand doctrine of conservation of energy. Even in the past twenty years as a teacher, I have been obliged to revise, modify and contradict. Words have often lost their meaning. We spake of compressible and incompressible gases as a matter of convenience perhaps, but to-day the distinction is entirely obliterated, and even the impalpable air, and still more impalpable hydrogen, become liquid. Then we readily recognized, as we thought, three states of matter; a fourth as different was almost as inconceivable as the mathematician's fourth dimension in space: to-day we allow Crookes to talk to us about ultra-gaseous matter, and persuade us that we are studying its peculiarities."

WILSON R. ELLIS, Esq., of Woodland, has published a very neat pamphlet of thirty-two pages, in which he gives in full Col. Ingersoll's article entitled "Why I am an Agnostic," which appeared in the *North American Review*, Dec., 1889, and then replies to it. His reply is a defence of Deism, or the belief in a Personal God. It is well written, and presents with clearness and vigor the inconsistencies and absurdities involved in the position of the Agnostics. In order to give our readers an idea of Mr. Ellis' style and the scope of his argument, we quote a long paragraph from pages 26 and 27:

"Take the eye, a small organ of that incomparably beautiful structure, the human body. In itself, it is a perfectly contrived optical instrument, constructed upon those scientific principles which have to do with the properties of light, with its refraction and focalizing. We contemplate it with delight and astonishment! How can we resist the overwhelming conviction that this organ of sight was preceded by the idea of sight, yes by sight itself? We study it still more closely. We separate it into its parts, and are certain that the genius who built the first telescope, found the secret here. We ponder! We marvel! How nicely it revolves in its socket! How sensitively the iris, seemingly of its own accord, closes or expands to admit the proper quantum of light! How quickly the lenses adapt them-

selves to the varying distance or size of the object viewed, regulating the focal point with an accuracy as beautiful as it is marvellous! Here is the measurement of distance, the appreciation of the properties of light, and the choice of materials. How shall we account for all this rationality? Did blind matter conceive the idea of sight and blinder force act upon it? Was it thus that the brain's photographic outfit was devised? Do you say, Mr. Ingersoll, that mere substance, in which there is no thought, planned the temple of thought; that mere matter, which never could experience or know the sensation of sight, saw that it was needful to put windows in that temple for its illumination? Does the eye discover nothing but the outside world? Is it blind to itself? Is there not a sight within sight which as clearly perceives the difference between a lie and a truth as the naked eye discovers the contrast between black and white? Is it not written on the sky-lights of the mind that the thought, which conceived the eye, projected at once the formation of the brain that should receive sight, and schemed the bodily structure of a living, moving creature whose physical existence and whose mental development should be closely dependent upon the power of sight? Here is the marshalling of many conceptions into the consummation of one purpose. Here is the forecasting of thought,—anticipation,—predetermination. Have the dull clouds, the inert rocks, the vagrant winds and the listless waters, potency to conspire of themselves to accomplish such god-like results,—to create such involved conceptions,—to execute such intricate and far-reaching designs? It is this instructive and intensely interesting study of the Deity question which Mr. Ingersoll waves away with impatient gesture, and puts aside for a sort of reasoning that disproves its own proof. His abstractions mystify him, and lead him into contradictions in his conclusions that would dishearten a less cheerful disposition. Might he not profitably rest from his worriment about first and final causes, and undertake the closer study of the phenomena of nature? Let him reverse the idea of his thought, commencing with particulars and working upward to generalization, instead of arguing downward from forced and contradictory conclusions. He need not pluck out his eye, nor the mote therein, to see

clearly the grand thought which mere seeing reveals,—a thought which will supply him with a theory of Creation as full of harmony as the spheres are full of symphonies."

RENAN, in his late "History of Israel," declares that there was no intellectual culture in the days of Joshua. He ridicules the idea of writing being an ordinary accomplishment in ancient times, affirms that it was "*unknown* in Abraham, Isaac, and Jacob's day," so that the signet referred to in Gen. xxxviii., 18, must be an anachronism.

Commenting on these positions of the French critic of Moses' annals, Cobern, the accomplished Egyptologist, says, "What a pity M. Renan had not withheld his statements a few months!" Because Professor Sayce, of Oxford, from an exhaustive examination of Greek *graffiti* found at Abydus in Upper Egypt declares that "a knowledge of writing must have been as widely spread, if, indeed, it were not more widely spread, among the citizens of the old classical world than it is among us to-day." Indeed, "the Babylonian tablets discovered two years ago at Tel el Amarna show that in the fifteenth century before our era—a century before the Exodus—active literary intercourse was going on between Babylonia and Egypt and smaller states also," and that "all over the civilized East there were libraries and schools and that Babylonian was as much the language of diplomacy and civilized society as French is now, with this difference that to read French is easily learned, but the cuneiform syllabary required years of hard study." It is also now known that the Pharaohs of that period gathered great libraries of scrolls of papyri and of parchment beautifully written and superbly illuminated. One such illuminated treatise fifty centuries in age unrolled before the eyes of its discoverer to the length of an hundred feet. Works of history and biography, philosophy and science, fable and allegory, are to be found in those collections, and it is affirmed by one of the best informed German Egyptologists that the quantity of these rolls is such that they would fill a building almost as large as the British Museum.

Moreover, it is now well known that the "letter writer" is seen in almost every monumental picture of a private family, as

one of its necessary members, and he carries his pen behind his ears in very modern fashion. Thus it is proved (says Cobern) that writing was practised in Egypt almost as many centuries before Moses as there have been centuries since.

At the same time this writer says "it is certain that the Egyptian boy had no easy task before him as he undertook to learn to read and write his native language." "The language of the Pharaohs is not an easy language to read. It is not a perfect language, to be compared with the Greek or the English. The facts by no means justify the statement of that popular scientist, Sir J. W. Dawson, in his latest work, that alphabetic writing has deteriorated from Moses' day down to our most inconvenient and unscientific English alphabet."—*Southern Presbyterian.*

MONTHLY MEETINGS.

BY THE SECRETARY.

APRIL, 1890.—The regular monthly meeting of the Institute was held in Association Hall, Twenty-third Street, New York, on Monday, April 7th, at 8 P.M. In the absence of the President, the chair was occupied by Rev. Dr. Howard Crosby, of New York City. The devotional exercises were led by Rev. Dr. Peter Stryker, of New York. The minutes of the last meeting were approved.

The regular paper of the evening was by Rev. John Y. Dobbins, of Trenton, N. J., on "Social Life in the Church." The paper and subject were discussed by Rev. Drs. Crosby and Stryker, Rev. Jesse F. Forbes, Mr. S. N. Wilder, and Franklin Burdge, Esq. On motion it was

Resolved, That the thanks of the Institute be presented to Rev. John Y. Dobbins for his admirable essay, and that a copy be requested for publication in CHRISTIAN THOUGHT.

MAY, 1890.—The regular meeting was held in Association Hall, Monday, May 5th, at 8 P.M., with the President, Rev. Dr. C. F. Deems, in the chair, who also conducted the devotional

exercises. The minutes of the last meeting were read and approved. The following names of new members were announced:

Thomas Edgar Murrell, M.D., Little Rock, Ark.; Gilbert Morrison, President Board of Normal School, Oswego, N. Y.; Mr. Albert A. Johnson, New York City; Mr. John H. Burtis, A.B., Brooklyn, N. Y.; Davis Garber, A.M., Professor Muhlenberg College, Allentown, Pa.; and Rev. Sylvester W. Lloyd, Batavia, N. Y.

It was announced that at the next meeting of the Institute a paper would be read by James McCosh, D.D., LL.D., ex-President of Princeton College, on "What Effect will the Resignation of Bismarck have in Allowing full Liberty to the Churches of Germany?"

The regular paper of the evening was by Rev. Alan Campbell, of New Brunswick, N. J., whose subject was "God's Thought in Human Society." On motion it was

Resolved, That the thanks of the Institute are due and hereby presented to the lecturer for his valuable paper, and that a copy be requested for publication in CHRISTIAN THOUGHT.

On motion, adjourned.